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DRAFT STANLY RANCH SPECIFIC PLAN  
ENVIRONMENTAL IMPACT REPORT

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*Submitted to the:*

CITY OF NAPA  
PLANNING DEPARTMENT

AUGUST 1998

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DRAFT STANLY RANCH SPECIFIC PLAN  
ENVIRONMENTAL IMPACT REPORT

*Submitted to the:*

CITY OF NAPA  
PLANNING DEPARTMENT

*Submitted by:*

BRADY / LSA

*In Conjunction with:*

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AUGUST 1998


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## STANLY RANCH SPECIFIC PLAN DRAFT EIR

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## Chapter I INTRODUCTION

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### A. Purpose of the EIR

In compliance with the California Environmental Quality Act (CEQA), this report describes the environmental consequences of the *Draft Stanly Ranch Specific Plan (Draft SRSP)*. This Project Draft Environmental Impact Report (EIR) is designed to fully inform City decision-makers, other responsible agencies, and the general public of the proposed project and the potential consequences of project approval. The EIR also examines various alternatives to the proposed project and recommends a set of mitigation measures to reduce or avoid potentially significant impacts. This EIR will be used by City planning staff, the Planning Commission, City Council and the public in their review of the *Draft Stanly Ranch Specific Plan*, related General Plan and zoning amendments, Development Agreement, and other necessary permits.

### B. Proposed Project

#### Defined Terms

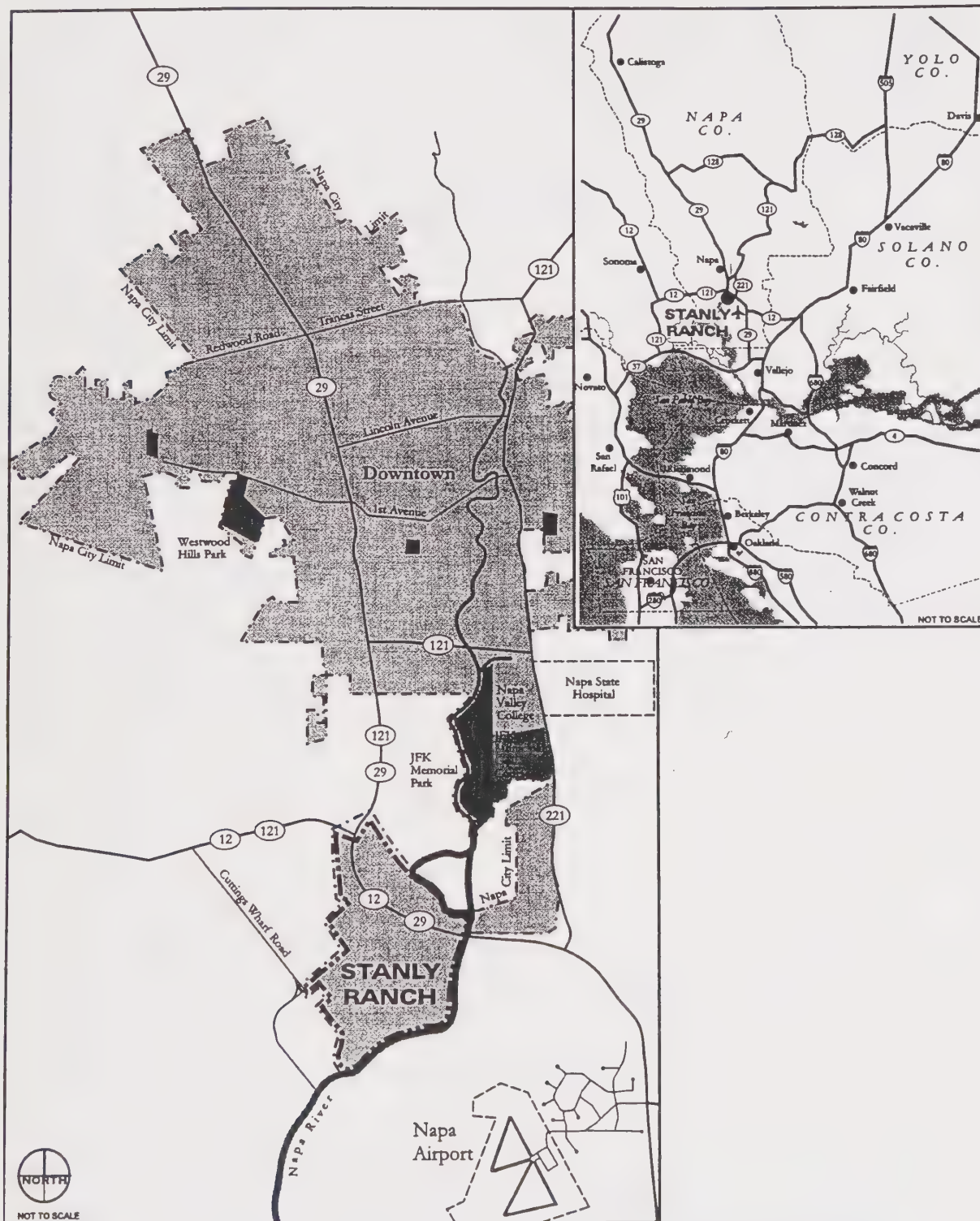
*Project/Proposed Project:* The development of the project site that could result in direct and reasonably foreseeable indirect changes in the physical environment in accordance with the *Draft SRSP* and related local, state and federal approvals, permits and entitlements.

*Project Site:* The 918-acre Stanly Ranch, as shown in Figure I-1 and III-1.

The Stanly Ranch project location and vicinity are shown in Figure I-1.

The City of Napa is the lead agency for environmental review of the proposed adoption of the *Draft SRSP* because the property lies entirely within City limits. The proposed project would involve the construction of a resort area with 300 resort residential units, lodge, spa, and golf club clubhouse; a winery and wine center; a residential area for 540 residential units; an employee housing area for 54 residential





Source: EDAW, 1997

# **STANLY RANCH** **SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT**

Figure I-1  
Regional Location Map

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units; a golf course; and acreage devoted to open space, parking, and streets within the overall 918-acre project site.

The Stanly Ranch site is located at the junction of State Routes (SR) 12, 29, and 121, about three miles south of downtown Napa and less than one mile northwest of the Napa County Airport. The Napa River flows along the sites eastern and southern boundary (see Figure I-1).

### **C. Project Review and Approval Process**

The City of Napa will use this document as part of its review of the proposed project. Other affected departments and agencies, such as the U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, State Regional Water Quality Control Board (RWQCB), the California Department of Transportation (Caltrans), and the California Department of Fish and Game will also use the document to review the proposed project for necessary permits or approvals as responsible agencies. Required agency permits and approvals are addressed in Chapter III of the EIR.

#### **1. City Permits/Approvals**

The following City permits and approvals will be required for the proposed project: General Plan Amendment; Specific Plan adoption; Specific Plan Rezoning; Tentative or Vesting Tentative and Final Subdivision Maps; Parcel Maps; Development Agreement; and a variety of other permits that are described in Chapter III, Project Description.

#### **2. Environmental Documentation**

Pursuant to the California Environmental Quality Act (CEQA), an Initial Study on the proposed project was prepared, and it was determined that an Environmental Impact Report would be required for the project, since it may have one or more significant effects on the environment. This EIR describes the likely environmental consequences of development of the proposed project. This assessment is designed to fully inform City decision-makers, other responsible agencies, and the public-at-large of the proposed action and the potential consequences of its approval and implementation. Before approving the proposed project, the City of Napa is required to certify the Final EIR.



## **D. EIR Scope**

The City of Napa circulated a Notice of Preparation (NOP) and Initial Study that identified the types of impacts that may result from the proposed *Draft SRSP*. The NOP was published on August 28, 1997 and mailed to public agencies and organizations considered likely to be interested in the potential impacts of the project. A public scoping session, was held on September 17, 1997. Comments received by the City on the NOP at the public scoping session were taken into account during the preparation of the Draft EIR. The NOP, Initial Study, and public comments are provided in Appendices A and B.

This Draft EIR focuses on the areas of concern identified in the NOP and Initial Study, and comments received on the NOP and at the public scoping session. The following environmental issues are addressed in this EIR:

- A. Land Use
- B. Public Policy
- C. Transportation and Circulation
- D. Geology, Soils, and Seismicity
- E. Hydrology, Drainage, and Water Quality
- F. Biological Resources
- G. Historic and Cultural Resources
- H. Visual Quality
- I. Population, Employment, and Housing
- J. Public Services
- K. Public Utilities
- L. Noise
- M. Air Quality
- N. Public Health and Safety

In the NOP/Initial Study analysis, the proposed project was determined not to have significant impacts on Energy and Mineral Resources. This EIR does not further analyze this issue, although it is briefly discussed in Chapter VI, CEQA Required Assessment Conclusions.

A "Project EIR" examines the environmental impacts of a specific development project. When an EIR has been certified for a project, no subsequent EIR shall be prepared except as provided in Section 15162 of the State EIR Guidelines. Per Government Code Section 65457, subsequent residential project entitlements (such as subdivision maps) consistent with the Specific Plan would be exempt from subsequent separate CEQA documents, absent grounds that require the preparation of a subsequent EIR or supplemental EIR. CEQA Guidelines Section 15181 also allows an agency to approve a project involving construction of housing or

neighborhood commercial facilities within an “urbanized area” [defined as a central city...with a population of 50,000 or more...] by using an existing EIR prepared for a Specific Plan. Additionally, it is the City’s intention that nonresidential components of the *Draft SRSP* may be approved without additional environmental documents. Public Resources Code Section 21083.3 allows a lead agency to limit the application of CEQA for future development projects consistent with zoning or community plans actions for which an EIR was prepared to impacts that are “peculiar to the parcel or to the project and which were not addressed as significant effects in the prior [EIR], or which substantial new information shows will be more significant than described in the prior [EIR]”.

### **E. Report Organization**

This EIR is organized into the following chapters:

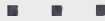
- *Chapter I - Introduction*, provides a summary of the proposed action and environmental review process; identifies potentially significant issues and concerns; and discusses the overall purpose, use, and organization of the EIR.
- *Chapter II - Summary*, provides a summary of the significant impacts that would result from implementation of the proposed project and describes mitigation measures recommended to reduce or avoid significant impacts.
- *Chapter III - Project Description*, provides a description of the proposed project, project site location and general existing conditions.
- *Chapter IV - Setting, Impacts and Mitigation Measures*, describes for each environmental technical topic: existing conditions (setting); potential environmental impacts and their level of significance; and mitigation measures recommended to mitigate identified impacts. Potential impacts are identified by levels of significance, as follows: significant impact (S); and less-than-significant impact (LTS). Each impact is categorized before and after implementation of any recommended mitigation measure(s).
- *Chapter V - Alternatives*, provides an evaluation of four alternatives to the proposed project, in addition to the No Project Alternative.
- *Chapter VI - CEQA Required Assessment Conclusions*, provides the required analysis of the overall impacts of the proposed project, including effects not found to be significant; the environmentally superior alternative; growth-inducing impacts; significant irreversible and unavoidable impacts; and cumulative impacts for the environmental issues found to have significant cumulative effects.



- *Chapter VII - Report Preparation*, identifies the reference documents, publications, and literature reviewed and cited, and provides a summary of those involved in report preparation.

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## Chapter II SUMMARY



### A. Project Under Review

The applicant has prepared the *Draft Stanly Ranch Specific Plan (Draft SRSP)*, May, 1997, that proposes the construction of a resort and golf course, tourist commercial area, residential community, and designated open space on a 918-acre parcel of land in the southernmost portion of the City of Napa (See Figure I-1).

#### 1. Main Project Components

Square footage, units and acreage for each element of the proposed project are summarized in Table III-1, and an Illustrative Master Plan is shown in Figure III-4 of Chapter III of the EIR. Access to the site would be via Stanly Lane which connects to State Route 12/121. Major components of the project are described below.

- **Resort Area.** The resort, located in the west central part of the site, would include the following elements: a main lodge (with restaurant, conference facility and retail uses); spa (with swimming pool and tennis courts); 200 guest cottages and 100 resort homes, 25 of which are anticipated to be managed as Carefree Club units; and a golf course clubhouse (with restaurant and golf shop). There would also be a maintenance facility for the resort. For all uses within the resort area, 385 parking spaces would be provided.
- **Residential Area.** The residential portion is proposed to include up to 540 for-sale homes in five neighborhoods, and 54 employee housing units. Densities for the five individual neighborhoods would range from 3 to 8 units per gross acre. In addition to off-street parking on individual residential lots, 135 parking spaces would be provided in designated parking areas for guests, and 100 on-site spaces would be provided for the employee housing.
- **Panhandle Area.** The panhandle area, located at the northwest end of the site, adjoining Stanly Lane near State Route 12/121, would include a winery and a wine center up to 40,000 square feet each, on 12 acres. Two hundred sixty (260) parking spaces are proposed for these uses.



- **Employee Parking and Interior Roads.** A 200-space parking lot would be provided for employees (and 20 spaces for public access) at the southern end of Stanly Lane. Employees would be shuttled in small vans from the parking area to resort destinations. The main entry road to the site would be Stanly Lane, heading south from SR 12/121. It would connect to a second main road, Old Suscol Road, which would be the main entry road to the resort and residential neighborhoods. These roads would be improved for the project and would connect to new local roads providing access to the resort and residential neighborhoods. An emergency access connection would be provided to Cuttings Wharf Road from the western end of the site.
- **Open Space.** A total of 717 acres of open space (78 percent of the site) would be provided as part of the project. This open space would include the following elements: 1) golf course (171 acres); 2) private neighborhood parks (2.5 acres); 3) Highlands open space in and around the resort, wine center and winery and residential areas (118 acres which would partly be used for vineyards); 4) a small Environmental Interpretive Center (less than one-half acre); and 5) Lowlands open space (425 acres). Nearly all of the extensive Lowlands acreage lies within the floodplain and along the Napa River. Grazing, which now occurs in this area, would be removed as part of the project.

## 2. Other Project Components

The project proposes to construct two separated public pedestrian/bicycle trails: 1) a Bay Trail paralleling Stanly Lane to Old Suscol Road and then paralleling Old Suscol Road to a junction with Cuttings Wharf Road; and 2) a River Trail with two components.

These two components would include:

- (a) A two-mile Northerly Loop trail constructed by the applicant extending along Stanly Lane from Old Suscol Road to the employee parking lot and continuing south to a set of loops at the river. One loop would cross under the SR 29 bridge and follow upper elevation areas along the levee and back toward the parking lot. A second loop would follow upper elevation areas south to the PG&E easements, then return along the PG&E access road to the parking lot.
- (b) A future Southerly Loop (one-mile long) would start at the historic railroad bed at the west end of the site. It would follow an upland alignment across the South Lowlands to the river levee where upper elevation lands could be utilized for a loop walk. The applicant would provide an easement for this

future trail to be utilized at the City's option if a trail were extended along the historic railroad bed from Cuttings Wharf Road.

Planned off-site circulation improvements include a signal at Stanly Lane and SR 12/121, with related widening of SR 12/121. In addition, mitigation fees are proposed to help pay for long-term intersection improvements at SR 12/121/29.

A City fire station may be constructed on the site or, alternatively, on City-owned property immediately north of the site. The preferred wastewater treatment provider for the project is the Napa Sanitation District. The second choice regarding wastewater treatment would be for the project to operate an on-site wastewater treatment/reclamation facility to process wastewater generated on-site for land application on the golf course and other landscaped areas within the project.

### **3. Draft SRSP Changes**

The applicant has submitted certain revisions to the May, 1997 *Draft SRSP* which have been incorporated into the project description and EIR review. These changes are summarized below. Major changes include:

- A revised, upgraded Stanly Lane, which would be four lanes to the wine center, is proposed parallel to the existing road but shifted about 30 to 40 feet east of its initial location in the northern half, and 30 to 40 feet west in the southern half to its end at an employee parking lot.
- The Bay Trail has been relocated from its initial proposed alignment to stay within the existing Stanly Lane street alignment to the point of a new golf course/trail underpass where it would cross to the east side of the new Stanly Lane. At Old Suscol Road, the Bay Trail would cross at a stop sign to the north side of Old Suscol Road, then continue west to Cuttings Wharf Road.
- Emergency access routes along Stanly Lane have been redesigned accordingly to reflect the above changes.
- On-site street widths have been increased per City recommendations.
- The Project River Trail has been revised to include Northerly and Southerly Loops, and the project applicant proposes to construct the Northerly Loop.
- The location of the employee housing and golf maintenance yard have been exchanged to shift the housing site farther from the highway.
- The Environmental Interpretive Center and its parking have been moved to a more accessible location adjacent to the employee parking lot. The Interpretive Center is expected to be operated privately or by a non-profit organization.



- Most of the eucalyptus trees would be removed due to tree health/public safety, although a row of trees would be retained along Stanly Lane, along the east side of proposed Neighborhood 1, and around golf hole 10 near the clubhouse to maintain a windrow effect and site screening as long as possible until new trees mature. Many new native and ornamental trees would be planted to line Stanly Lane, Old Suscol Road and other project streets, as well as along several drainageways and throughout the golf course.
- Proposed improvements to the intersection of State Routes 12 and 29 would not include triple left turns; instead, the project would contribute “fair share” traffic mitigation fees toward construction of a long-term improvement anticipated to be a staged diamond interchange. Policies of the *Draft SRSP* would be revised accordingly.
- Golf hole 10 has been moved closer to Home Hill.
- Residential neighborhood densities have been reduced in neighborhoods closest to the Rural Urban Limit (RUL) line.
- “Uplands” are now identified as “Highlands” for greater clarity.
- Stanly Ranch would observe a policy of zero net fill in the Napa River floodplain.
- Reclaimed wastewater would be used on the golf course and major landscaped outdoor areas.
- The proposed Specific Plan’s Zoning component has been revised to be a “stand alone” zoning document.
- An employee transit shuttle has been included.
- Acreages for specific land uses have been refined.

Documents related to these changes are available in the Napa Planning Department. More detailed descriptions of the proposed land uses are identified in the project description section. The applicant expects to make additional changes to the *Draft SRSP*, and implement measures as a result of reviewing the Draft EIR. The draft Development Agreement is also expected to be revised. All required changes would be made prior to any final project approval so that the *Specific Plan* as adopted would embody all approved mitigation measures.

## **B. Summary of Impacts and Mitigation Measures**

This summary provides an overview of the analysis contained in Chapter IV, Setting, Impacts, and Mitigation Measures. CEQA requires that a summary include discussion of: 1) potential areas of controversy; 2) significant impacts; 3) significant

unavoidable impacts; 4) recommended mitigation measures; and 5) alternatives to the project, as follows.

### **C. Potential Areas of Controversy**

The potential areas of controversy that surround the *Draft SRSP* and that are addressed in detail in Chapter IV include: land use; public policy; transportation and circulation; geology, soils, and seismicity; hydrology, drainage, and water quality; biological resources; historic and cultural resources; visual quality; population, employment, and housing; public services; public utilities; noise; air quality; and public health and safety. The “high profile” areas of controversy, to date, have centered around land use, traffic, water supply, wastewater treatment capacity, airport land use compatibility, and visual impacts.

### **D. Significant Impacts**

Under CEQA, a significant impact on the environment is defined as a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project. These conditions include land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance.

Implementation of the *Draft SRSP* has the potential to generate environmental impacts in a number of areas. Impacts for the following topics would be significant without implementation of mitigation measures, but would be reduced to a less-than-significant level if the mitigation measures noted in this EIR are implemented:

- Land Use
- Public Policy
- Transportation and Circulation
- Geology, Soils, and Seismicity
- Hydrology, Drainage, and Water Quality
- Biological Resources
- Historic and Cultural Resources
- Visual Quality
- Population, Employment, and Housing
- Public Services
- Public Utilities
- Noise
- Air Quality
- Public Health and Safety



Cumulative impacts are addressed in Chapter VI of the EIR. All cumulative impacts could be reduced to a less-than-significant level by the recommended mitigation measures, except for the issues mentioned below under Section II.E.

### **E. Significant Unavoidable Impacts**

After mitigation, the project would have significant unavoidable impacts or potentially significant impacts related to the following issues:

- Traffic impacts due to exceedance of LOS standards
- Water quality degradation
- Biological resource impacts related to water quality
- Potential loss of historic resources
- Visual impacts
- Increased regional air emissions

### **F. Recommended Mitigation Measures**

This Draft EIR discusses specific mitigation measures to reduce impacts to a less-than-significant level. These are summarized in Table II-1 and also addressed in Chapter IV of the Draft EIR.

### **G. Alternatives to the Proposed Project**

The five alternatives to the proposed project that are analyzed in this Draft EIR include:

- The CEQA-required No Project Alternative, which would maintain the current agricultural and viticultural uses of the site.
- The All Resort Alternative, which would keep the resort elements currently proposed in the *Draft SRSP*, and also add a second resort area that would replace the residential component of the *Draft SRSP* with a 160-room hotel and conference center.
- The Agricultural Alternative, which would provide for agricultural uses on all portions of the site where agriculture would be feasible. This alternative would include a winery.
- The On-Site Wastewater System Alternative which would be the same as the proposed project except that it would provide for on-site wastewater collection and treatment facilities.

- The Reduced Density Alternative which would reduce market-rate residential units by 30 percent.

In addition to the No Project Alternative, the Agricultural Alternative is identified as the Environmentally Superior Alternative. Each of the alternatives is discussed in detail in Chapter V of the EIR.

## **H. Summary Tables**

Information in Table II-1, Summary of Impacts and Mitigation Measures, has been organized to correspond to environmental issues and significant impacts discussed in Chapter IV. The table is arranged in four columns: 1) impacts; 2) level of significance prior to mitigation measures; 3) mitigation measures; and 4) level of significance after mitigation. A series of mitigation measures is noted where more than one mitigation measure would be required to achieve a less-than-significant impact. Alternative mitigation measures are identified when available. For a complete description of potential impacts and recommended mitigation measures, please refer to the specific discussions in Chapter IV.

Table II-2, Summary of Less-Than-Significant Impacts and Recommended Conditions of Approval, summarizes the identified less-than-significant impacts from Chapter IV and recommended Conditions of Approval associated with the impacts.

Table II-3, Summary of Relationship of Alternatives' Impacts to Project's Significant Impacts (Prior to Mitigation), compares each alternative's impacts to those of the project. When an alternative would result in a reduction of impacts or a worsening of impacts, this is noted in Table II-3.

**Table II-1**  
**SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Level of Significance Prior to Mitigation	Mitigation Measure	Level of Significance After Mitigation
<b>A. Land Use</b>			
<b>LU-1:</b> Adoption of the <i>Draft SRSP</i> would change the site's land uses by concentrating residential and resort-related commercial uses in an area used primarily for grazing, viticulture and open space. Land use conflicts could arise between residential or resort uses developed under the <i>Draft SRSP</i> and agricultural uses at the urban-rural interface.	S	<p><b>LU-1:</b> The following measures shall be implemented to reduce the potential for land use conflicts with adjacent agricultural uses:</p> <ul style="list-style-type: none"> <li>The Specific Plan (SP) zoning regulations shall be amended to incorporate and apply provisions of Chapter 17.60.090A to all residential and resort unit properties adjacent to or within 300 feet of the RUL line. These provisions include: <ol style="list-style-type: none"> <li>A minimum 80-foot setback of any dwellings or structures designed for human habitation from the RUL line. This setback shall include a minimum 15-foot landscaped buffer designed to provide a clear boundary between urban and agricultural uses.</li> <li>Sound/noise reducing design and construction techniques shall be required at the tentative map or use permit stage, whichever is applicable, to reduce noise levels to occupants from adjoining farm operations to acceptable interior levels as defined in the Noise section of this EIR.</li> <li>A recorded notice to run with the land that these properties may be subject to agricultural impacts (such as the dust, noise, agricultural chemicals and odors associated with operation of nearby farms or vineyards), and that the nearby farmer/grower/rancher has the "right-to-farm" and the property owner may not sue to prevent such activities normally associated with agricultural activities. This notification shall include positive assurance that a prospective buyer has received this information.</li> </ol> </li> <li>The SP zoning shall require attractive landscaping and fencing between the Bay Trail and adjacent lands beyond the RUL line, provision of barriers to prevent unauthorized motor vehicle use, and signs describing rules of operation at appropriate locations.</li> </ul>	LTS

S: Significant; LTS: Less Than Significant; PS: Potentially Significant; SU: Significant Unavoidable



Table II-1 *continued*

Impact	Level of Significance Prior to Mitigation	Mitigation Measure	Level of Significance After Mitigation
<u>LU-2</u> : Implementation of the project could result in airport-related land use compatibility impacts in the form of increased noise and overflight annoyance complaints.	S	<u>LU-2</u> : Implementation of the mitigation measures identified in the Public Policy section of the EIR related to easements and disclosure statements for on-site property owners shall be implemented to reduce potential airport-related land use incompatibilities, including, noise and overflight annoyance.	LTS
<b>B. Public Policy</b>			
<u>POL-1</u> : Implementation of the <i>Draft SRSP</i> could conflict with policies of the adopted <i>General Plan</i> related to the following topics: adequacy of urban services; level of service standards for transportation impacts; street standards; location of residential development near urban services and transit; park fees; agricultural/urban conflicts; and scenic resources (see Table E-1 in Appendix E for more detail).	S	<u>POL-1a</u> : The applicant shall implement mitigation measures identified in Sections IV.C, IV.J, IV.K: Transportation, Public Services, and Public Utilities of the EIR. These measures would reduce impacts on service providers and infrastructure.	LTS
		<u>POL-1b</u> : Should the <i>Draft SRSP</i> be approved prior to adoption of the <i>Draft General Plan</i> , the <i>Draft SRSP</i> General Plan Amendment shall specify use of the Congestion Management Plan standards and <i>Draft General Plan</i> policy T2.2 for SR 12/121 and 29/12, and <i>Draft General Plan</i> standards for City streets significantly affected by the proposed project. Policy T2.2 ensures that development meets LOS standards unless findings are made that achieving other specific public goals in the <i>General Plan</i> outweigh this requirement.	
		<u>POL-1c</u> : The <i>Draft SRSP</i> General Plan Amendment shall include proposed street standards for the Stanly Ranch.	
		<u>Mitigation Measure POL-1d</u> : Through the Development Agreement, the applicant and City shall investigate means of providing more on-site commercial uses within the proposed wine center to meet everyday needs such as dry cleaning, banking, and grocery facilities for residents and employees.	
		<u>POL-1e</u> : Should the <i>Draft SRSP</i> be adopted prior to adoption of the <i>Draft General Plan</i> , the <i>Draft SRSP</i> General Plan Amendment shall include an exception to Policy B7b to permit mixed-use projects where substantial traffic reduction programs and urban services are provided on-site.	
		<u>POL-1f</u> : Should the <i>Draft SRSP</i> be adopted prior to adoption of the <i>Draft General Plan</i> , the <i>Draft SRSP</i> General Plan Amendment shall modify Policy PR 1.12 to permit credits to be given for the provision of private recreational facilities.	

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Table II-1 *continued*

Impact	Level of Significance Prior to Mitigation	Mitigation Measure	Level of Significance After Mitigation
POL-1 <i>continued</i>		<p><u>POL-1g</u>: The applicant shall implement Mitigation Measure LU-1, which addresses impacts related to agricultural/urban conflicts.</p> <p><u>POL-1h</u>: On Home Hill (Neighborhood 2), the applicant shall eliminate the easternmost six townhomes and the proposed easternmost row of homes to the second cul-de-sac/circle (approximately 36 lots). At the earliest possible time as part of Phase 1, the applicant shall replant this area with a new tree grove comprised of native and ornamental tree species, including evergreens of sufficient height to screen two-story homes within five years of planting.</p>	
<p><u>POL-2</u>: Implementation of the <i>Draft SRSP</i> could conflict with policies of the City's <i>Draft General Plan</i> related to the following topics: multi-family residential density provisions; minimization of urban/rural conflicts; application of hillside standards; minimization of the need for new public facilities; provision of on-site, everyday commercial services (i.e., banking, childcare, dry cleaning); and street standards (see Table E-2 in Appendix E for more detail).</p>	S	<p><u>POL-2a</u>: The <i>Draft SRSP</i> (p. 13) shall be corrected prior to adoption to refer to Figure 5 as the <i>Draft SRSP</i> Land Use Plan, not the land use designations identified by the <i>Draft General Plan</i> for the project site. (If the <i>Draft SRSP</i> is approved, this map with any changes approved by the City Council would become the <i>General Plan</i> land use plan for the Stanly Ranch.)</p> <p><u>POL-2b</u>: The <i>Draft SRSP</i> General Plan amendment shall include an exception to <i>Draft Policy Document</i> Multi-Family Residential (MFR) language to permit densities greater than 15 units per acre on the Stanly Ranch where such units are low-income housing.</p> <p><u>POL-2c</u>: The <i>Draft SRSP</i> Appendix B (Land Use and Development Standards and Zoning) shall be amended to incorporate and apply the provisions of Section 17.60.090 of the Zoning Ordinance regarding agricultural buffers for residential and resort units within 300 feet of the RUL, as also recommended in Mitigation Measure LU-1.</p> <p><u>POL-2d</u>: Residential units within 15 percent (+) slope areas of Home Hill (Neighborhood 2), and development on Cistern Hill shall comply with use permit, grading, Hillside Design Guidelines, and alternative development standards of the Hillside Overlay District.</p>	LTS

S: Significant; LTS: Less Than Significant; PS: Potentially Significant; SU: Significant Unavoidable

Table II-1 *continued*

Impact	Level of Significance Prior to Mitigation	Mitigation Measure	Level of Significance After Mitigation
POL-2 <i>continued</i>		<p><u>POL-2e</u>: Through the Development Agreement, the applicant and City shall investigate means of providing more on-site commercial uses within the proposed wine center to meet everyday needs such as dry cleaning, banking, and grocery facilities for residents and employees.</p> <p><u>POL-2f</u>: The Stanly Ranch General Plan amendment shall include street standards for the proposed project.</p>	
POL-3: Appendix B of the <i>Draft SRSP</i> sets forth regulations that are potentially inconsistent with Land Use Policy 1.5 of the <i>Draft SRSP</i> , and that may conflict with the existing Hillside Overlay District.	S	<p><u>POL 3</u>: Implementation of the following modifications and corrections to the proposed zoning and development regulations set forth in Appendix B of the <i>Draft SRSP</i> would reduce this impact to a less-than-significant level:</p> <ul style="list-style-type: none"> <li>The <i>Draft SRSP</i> Appendix B (Land Use and Development Standards and Zoning) shall be revised to incorporate and apply the provisions of Section 17.60.090 of the Zoning Ordinance regarding agricultural buffers for homes and resort units within 300 feet of the RUL in the proposed SP Zone 2 Residential District and the SP Zone 1 Resort District as described in more detail in Section IV.A, LU-1.</li> <li>Residential units within 15 percent (+) slope areas of Home Hill (Neighborhood 2), and development on Cistern Hill shall comply with use permit, grading, Hillside Design Guidelines, and alternative development standards of the Hillside Overlay District.</li> </ul>	LTS
<b>C. Transportation and Circulation</b>			
<u>TRANS-1</u> : The <i>Draft SRSP</i> makes adequate physical provision for emergency vehicle access. However, the routes for evacuation in an emergency may not be clear to visitors.	S	<p><u>TRANS-1</u>: An emergency evacuation plan shall be developed for the site, including the identification of emergency evacuation routes and the training of staff in traffic control as well as traffic control activities such as directing visitors during emergencies. The evacuation plan shall also include an annual review with the appropriate City departments regarding field procedures. The initial and subsequent annual emergency plans shall be reviewed and approved by the City prior to approval of any building occupancy.</p>	LTS

S: Significant; LTS: Less Than Significant; PS: Potentially Significant; SU: Significant Unavoidable



Table II-1 *continued*

Impact	Level of Significance Prior to Mitigation	Mitigation Measure	Level of Significance After Mitigation
<u>TRANS-2:</u> The project would add traffic to critical intersections in the vicinity of the site. For the Existing and Cumulative scenarios during the weekday PM and weekend peak hours, the intersection of SR 12/121 and Stanly Lane would not satisfy the LOS standards of the City or CMA.	S	<u>TRANS-2:</u> The project shall construct a traffic signal at the intersection of State Route 12/121 and Stanly Lane. The signal shall be operational by occupancy of the main resort.	LTS
<u>TRANS-3:</u> The project would add traffic to critical intersections in the vicinity of the site. For the Cumulative-Plus-Project scenario in the PM peak hour, the intersection of SR 12/29/121 would not satisfy the CMA's LOS standards.	S	<u>TRANS-3:</u> The following combination of mitigation measures shall be implemented: <ul style="list-style-type: none"> <li>• To mitigate the impacts on the State Route 12/29/121 intersection for the "Cumulative-Plus-Project" scenario, the project applicant shall pay Street Improvement Fees based on the rates in effect at the time of building permit issuance.</li> <li>• To assist in developing a long-term solution for the intersection in a timely manner for this project and other future traffic, the applicant shall develop the Caltrans Project Study Report (PSR) which evaluates and develops costs for the long term improvements noted above. The applicant may receive credit from the Street Improvement Fees for costs associated with the PSR.</li> <li>• If feasible, the project may construct a portion of the long term improvement approved in the PSR report and receive Street Improvement Fee credit for costs associated with the construction.</li> </ul>	PS
<u>TRANS-4:</u> The project would add traffic to critical intersections in the vicinity of the site. For the Existing-Plus-Project scenario in the PM peak hour, the intersection of SR 29 northbound ramps at Imola Avenue would not satisfy the City's LOS standards.	S	<u>TRANS-4:</u> To mitigate the impacts at the State Route 29 northbound ramp intersection at Imola Avenue, the project shall pay standard City street improvement fees.	PS (Short Term) LTS (Long Term)

S: Significant; LTS: Less Than Significant; PS: Potentially Significant; SU: Significant Unavoidable

Table II-1 *continued*

Impact	Level of Significance Prior to Mitigation	Mitigation Measure	Level of Significance After Mitigation
<u>TRANS-5:</u> The project would add traffic to critical intersections in the vicinity of the site. For the Existing-Plus-Project scenario in the weekend peak hour, the intersection of Cuttings Wharf Road and State Route 12/121 would not satisfy the significance criteria.	S	<p><u>TRANS-5:</u> One of the following measures shall be implemented:</p> <ul style="list-style-type: none"> <li>To mitigate the impacts at the intersection of Cuttings Wharf Road and State Route 12/121, for the Existing-Plus-Project scenario, the applicant shall contribute toward the project's fair contribution toward the installation of a traffic signal at this location. The project contributes 9.8 percent of the traffic during the weekend peak hour. As the City does not have jurisdiction at this intersection, the project fees should be held in a City trust account for the construction of a signal at this location. Further, the installation of a traffic signal at this location would only be provided once Caltrans signal warrants are met (PS: Short Term) (LTS: Long Term), <u>or</u></li> <li>To mitigate project impacts at the intersection of Cuttings Wharf Road and State Route 12/121, for the Existing-Plus-Project scenario, the project shall construct a full acceleration lane for traffic exiting Cuttings Wharf Road onto westbound SR 121/121. This mitigation would require widening SR 12/121 to the east and west of Cutting Wharf Road to maintain one travel lane in each direction. This improvement would eliminate the westbound (mainline) traffic from the LOS calculation resulting in significant improvement to the Existing-Plus-Project condition.</li> </ul>	<p>PS (Short Term) LTS (Long Term)</p> <p>LTS</p>
<u>TRANS-6:</u> The project has the potential to create short-term impacts during construction of on-site facilities as well as proposed improvements to the intersection of Stanly Lane and SR 12/121 and SR 12/29/121 intersection.	S	<p><u>TRANS-6:</u> The following combination of mitigation measures shall be implemented:</p> <ul style="list-style-type: none"> <li>A detailed traffic control plan shall be prepared for construction of any improvements to SR 12/121 and the public portion of Stanly Lane (up to 500 feet south of the SR 12/121 intersection). The plan must satisfy City, County and Caltrans requirements for traffic flow in their various jurisdictions. In addition, a plan shall be developed to assure that any construction traffic attributable to on-site development does not contribute to significant impacts on the public roadway system. The plan shall be approved by the City and Caltrans as appropriate prior to the issuance of any building permits for either on-site or off-site roadway construction.</li> </ul>	LTS

S: Significant; LTS: Less Than Significant; PS: Potentially Significant; SU: Significant Unavoidable

Table II-1 *continued*

Impact	Level of Significance Prior to Mitigation	Mitigation Measure	Level of Significance After Mitigation
TRANS-6 <i>continued</i>		<ul style="list-style-type: none"> <li>All required public frontage and street improvements shall be designed and built in accordance with Caltrans and/or City of Napa ordinances and the <i>Public Works Department (PWD) Standard Specifications</i>, unless otherwise approved by the Public Works Director.</li> <li>During non-working hours, open trenches shall be provided with appropriate signage, flashers, and barricades approved by the street superintendent to warn oncoming motorists, bicyclists and pedestrians of potential safety hazards.</li> <li>All road surfaces shall be restored to pre-project conditions after completion of any project activities.</li> </ul>	
<b>D. Geology, Soils, and Seismicity</b>			
<u>GEO-1</u> : Expected seismic shaking at the project site could result in damage to structures, nonstructural damage, and possible injury to site occupants.	S	<p><u>GEO-1</u>: Although the potential for strong seismic shaking cannot be eliminated at the project site and surrounding area, all of the following mitigation measures shall be implemented to reduce the impacts related to expected strong ground shaking to less-than-significant levels:</p> <ul style="list-style-type: none"> <li>All structures proposed for the project shall be designed and constructed in accordance with the provisions of the most recently adopted California Building Code. Issuance of building permits shall not be approved until after review and approval of building design to ensure compliance with the provisions of the Code by the City Public Works Department.</li> <li>The master developer shall prepare an earthquake preparedness and emergency response plan for all public use facilities, including the golf clubhouse, the wine center, and resort lodge. The plan shall be submitted for review and approval by the City Department of Public Works prior to occupancy of the structures.</li> <li>Prior to occupation of residential units at the project site, an earthquake hazards information document shall be prepared by the applicant and made available to any potential occupants. The document shall describe the potential for strong ground shaking at the site, potential effects of such shaking, and earthquake preparedness procedures.</li> </ul>	LTS

S: Significant; LTS: Less Than Significant; PS: Potentially Significant; SU: Significant Unavoidable



Table II-1 *continued*

Impact	Level of Significance Prior to Mitigation	Mitigation Measure	Level of Significance After Mitigation
<u>GEO-2</u> : Potential liquefaction of alluvial sediments on the flood plain of the Napa River could result in damage to improvements constructed at the project site.	S	<p><u>GEO-2</u>: The following combination of mitigation measures shall be implemented to reduce the impacts related to liquefaction of site soils during strong ground shaking or settlement:</p> <ul style="list-style-type: none"> <li>• Prior to construction of any structures for human habitation or other improvements within areas of the site mapped as bay mud, an evaluation of the potential for liquefaction shall be performed by a licensed Geotechnical Engineer or Certified Engineering Geologist. The evaluation shall be based on site-specific subsurface data and shall conform with the California Division of Mines and Geology "Guidelines for Evaluating Seismic Hazards in California" (CDMG, 1997). The evaluation shall also address the potential for damage to building foundations, pavements and utilities due to settlement under static (non-seismic) conditions. A report of the evaluation shall be prepared and submitted to the City Department of Public Works prior to the issuance of a building permit.</li> <li>• All water supply and wastewater pipelines constructed in areas mapped as bay mud shall be designed to minimize the potential for damage in the event of strong ground shaking and potential liquefaction. The pipeline design shall be prepared by a licensed engineer with experience in design and construction in areas of high liquefaction potential.</li> </ul>	LTS
<u>GEO-3</u> : The high potential for corrosion of uncoated steel within soils could present significant maintenance problems for pipelines constructed for the project.	S	<p><u>GEO-3</u>: The following mitigation measure would reduce the potential for the adverse effects of soils on buried utilities:</p> <ul style="list-style-type: none"> <li>• All buried utilities and other structures shall be designed by a qualified licensed engineer and constructed to provide corrosion protection. Corrosion protection could include cathodic protection for metallic materials, providing noncorrosive coatings for corrosive metals, use of noncorrosive materials, or placement of noncorrosive backfill around buried structures.</li> </ul>	LTS

S: Significant; LTS: Less Than Significant; PS: Potentially Significant; SU: Significant Unavoidable

Table II-1 *continued*

Impact	Level of Significance Prior to Mitigation	Mitigation Measure	Level of Significance After Mitigation
<b>E. Hydrology, Drainage, and Water Quality</b>			
<b>HYDRO-1:</b> Placement of fill within the flood plain could increase flood elevations, exacerbating existing flooding problems along the Napa River.	S	<b>HYDRO-1:</b> No net increase in fill within the Corps-designated flood plain shall be permitted in any phase of the project or for the project as a whole. Any placement of fill within the flood plain shall be mitigated by removal of an equal or greater amount of material from the flood plain in a different location. Prior to approval of the final grading plan, the applicant shall quantify the amount of fill proposed for placement (and removal) in the flood plain. The City of Napa shall not approve the final grading plan unless the applicant has demonstrated that the "no net fill" in the flood plain criterion has been met. Under no circumstance shall fill be placed in the flood way without express authorization of the City of Napa Public Works Department.	LTS
<b>HYDRO-2:</b> Construction activities and post-construction site uses could result in degradation of water quality in nearby surface water bodies by reducing the quality of storm water runoff. Habitat could also be degraded due to sedimentation in wetlands.	S	<b>HYDRO-2a:</b> The applicant shall prepare and implement a Storm Water Pollution Prevention Plan (SWPPP) designed to reduce potential impacts to surface water quality through the construction and life of the project. The SWPPP would act as the overall program document designed to provide measures to mitigate potential water quality impacts associated with implementation of the <i>Draft SRSP</i> (and include the Integrated Pest Management Plan (IPMP), Chemical Application Management Plan (CHAMP), and Water Quality Monitoring Plan). The SWPPP shall include: <ul style="list-style-type: none"> <li><i>Specific and detailed BMPs designed to mitigate construction-related pollutants.</i> These controls shall include practices to minimize the contact of construction materials, equipment, and maintenance supplies (e.g., fuels, lubricants, paints, solvents, adhesives) with storm water. The SWPPP shall specify properly-designed, centralized storage areas that protect these materials from the rain.</li> </ul>	PS

S: Significant; LTS: Less Than Significant; PS: Potentially Significant; SU: Significant Unavoidable

Table II-1 *continued*

Impact	Level of Significance Prior to Mitigation	Mitigation Measure	Level of Significance After Mitigation
HYDRO-2 <i>continued</i>		<p>An important component of the storm water quality protection effort is knowledge on the part of the site supervisors and workers. To educate on-site personnel and maintain awareness of the importance of storm water quality protection, site supervisors shall conduct regular "informal tailgate" meetings to discuss pollution prevention. The frequency of the meetings and required personnel attendance list shall be specified in the SWPPP.</p> <p>The SWPPP shall specify a monitoring program to be implemented by the construction site supervisor, and must include both dry and wet weather inspections. Erosion control BMPs contained in the SWPPP shall be incorporated in the project grading and erosion control plan, which is reviewed and approved by the City. City of Napa personnel shall conduct regular inspections to review compliance with the grading and erosion control plan (this is already standard procedure). RWQCB personnel, who may make unannounced site inspections, are empowered to levy considerable fines on the developer if it is determined that the SWPPP has not been properly prepared and implemented.</p> <p>BMPs designed to reduce erosion of exposed soil may include, but are not limited to: soil stabilization controls; watering for dust control; perimeter silt fences; placement of hay bales; and sediment basins. The potential for erosion is generally increased if grading is performed during the rainy season as disturbed soil can be exposed to rainfall and storm runoff. If grading must be conducted during the rainy season (between October 15 and April 1), the primary BMPs selected shall focus on erosion control, that is, keeping sediment on the slopes. End-of-pipe sediment control measures (e.g., basins and traps) shall be used only as secondary measures. If hydro seeding is selected as the primary soil stabilization method, then slopes shall be seeded by September 1 and irrigated to ensure that adequate root development has occurred prior to October 1. In addition, all grading conducted during the rainy season shall be conducted under a DPW-</p>	

S: Significant; LTS: Less Than Significant; PS: Potentially Significant; SU: Significant Unavoidable



Table II-1 *continued*

Impact	Level of Significance Prior to Mitigation	Mitigation Measure	Level of Significance After Mitigation
HYDRO-2 <i>continued</i>		<p>approved erosion and sediment control plan. Entry and egress from the construction site shall be carefully controlled to minimize off-site tracking of sediment. Vehicle and equipment wash down facilities shall be constructed and designed to be accessible and functional both during dry and wet conditions.</p> <ul style="list-style-type: none"> <li>• <i>Specific and detailed BMPs designed to mitigate post-construction-related pollutants.</i> The SWPPP shall include all provisions of the conceptual Water Quality Management Plan submitted by the applicant (Appendix F), including specific details about each BMP function, location, and size (including details regarding biofilters, wet ponds, infiltration systems, and porous paving). In addition, the following mitigations shall be incorporated into the SWPPP and its supporting plans: <ul style="list-style-type: none"> <li>(a) The IPMP and CHAMP (which are part of the SWPPP) shall cover the golf course, orchard, vineyards, and common landscaping areas. The plans shall be implemented by the Stanly Ranch Community Owners Association or other appropriate entity.</li> <li>(b) The inspection and maintenance plan for the treatment control BMPs shall be prepared by a Professional Engineer or Registered Geologist with expertise in erosion and sediment control. The plan shall include criteria for characterization of sediment removed from detention structures, reuse of the sediment on-site, or disposal at an appropriate off-site disposal facility. Chemical characterization of the sediments, shall at a minimum include analyses for heavy metals (cadmium, chromium, nickel lead, and zinc), total petroleum hydrocarbons, diazinon (using enzyme-linked immunosorbent assay (ELISA)), and chlorpyrifor (using ELISA). Chemical characterization shall be conducted for each sediment removal event from detention</li> </ul> </li> </ul>	

S: Significant; LTS: Less Than Significant; PS: Potentially Significant; SU: Significant Unavoidable

Table II-1 *continued*

Impact	Level of Significance Prior to Mitigation	Mitigation Measure	Level of Significance After Mitigation
HYDRO-2 <i>continued</i>		<p>structures and completed in accordance with the U.S. Environmental Protection Agency's Test Methods for Evaluating Solid Waste (SW-846). Sediment determined to be of adequate quality (i.e., non-hazardous and/or below Preliminary Remediation Goals (PRGs) for residential land use, as established by U.S. EPA), can be used on-site. If, after five years of monitoring, results indicate that the sediments are non-hazardous and below PRGs, monitoring may be discontinued. The plan shall be implemented by the Stanly Ranch Community Owners Association or other appropriate entity.</p> <p>(c) The water quality monitoring plan (which is part of the SWPPP and covers the entire project site) shall be prepared by a Professional Engineer or Registered Geologist with expertise in surface and groundwater quality (professional). Baseline surface and groundwater quality monitoring stations shall be established and monitored prior to beginning of construction, through the construction period, and for a minimum of five years after the completion of construction with the approval of the City Department of Public Works. Water quality monitoring within the Napa River would not be a requirement of the plan. Surface water samples shall be collected within one hour after the initiation of runoff at each station during a significant storm (preferably the first storm of the water year to characterize the "first flush"). Subsequent water quality samples shall be collected at each station during storms at least twice per year. Preparers of the monitoring plan shall consult with the Regional Water Quality Control Board to develop a list of sampling parameters. The analyses considered should include pesticides (including, but not limited to, acephate, diazinon (by ELISA methodology), ethoprop, f. sulfoxide, methamidophos, simazine, and chlorpyrifos (by ELISA methodology)), heavy metals (cadmium, chromium, nickel, lead, and zinc), biological oxygen demand, chemical oxygen demand, total suspended</p>	

S: Significant; LTS: Less Than Significant; PS: Potentially Significant; SU: Significant Unavoidable

Table II-1 *continued*

Impact	Level of Significance Prior to Mitigation	Mitigation Measure	Level of Significance After Mitigation
HYDRO-2 <i>continued</i>		solids, total dissolved solids, total phosphorous, TKN, NO <sub>2</sub> , and NO <sub>3</sub> . The monitoring and mitigation program shall be largely self-directed; that is, the Stanly Ranch Community Owners Association or other appropriate entity shall not wait for direction from the RWQCB or other agency if the data indicate pollutant levels exceeding estimated baseline conditions (or detectable levels of pesticides) are present. If pollutant levels in the runoff exceed estimated baseline conditions, the professional should recommend, and the applicant should implement, prompt and effective measures to prevent subsequent exceedances.	
		<u>HYDRO-2b</u> : The Public Works Department shall review the SWPPP prior to approval of grading plans to ensure that the requirements listed above are included in the plan. Copies shall be provided to the RWQCB for their review.	
		<p><u>HYDRO-2c</u>: The winery shall obtain a NPDES permit from the Regional Water Quality Control Board prior to establishment of that use.</p> <p>As a practical matter, even after implementation of all mitigation measures described above, some pollutants not formerly associated with the site, may have impacts on receiving water quality. However, the mitigation measures described above are rigorous by industry standards and the monitoring plan would be designed to detect increases in pollutant loading relative to existing conditions. Remedial actions would be required if pollutant loading was observed to increase. Further, former agricultural land uses (i.e. grazing in the Lowlands) have negative water quality impacts of their own (grazing is associated with increased ammonia levels and biological oxygen demand and sedimentation). Therefore, from the perspective of runoff water quality in receiving waters, the project may actually result in a net benefit. However, because water quality impacts to receiving waters cannot be guaranteed to be less than significant, the impact (after mitigation) is defined as potentially significant.</p>	

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Table II-1 *continued*

Impact	Level of Significance Prior to Mitigation	Mitigation Measure	Level of Significance After Mitigation
<u>HYDRO-3</u> : The existing levees along the Napa River at the project site may fail, and additionally may possibly create a safety hazard to hikers using trails that could be located on the levee.	S	<u>HYDRO-3</u> : The applicant shall acquire a letter of agreement from PG&E documenting PG&E's commitment to maintain the levee segment providing access to their valve controls for as long as access to their valve controls is needed. The applicant shall submit a copy of the letter to the City of Napa for review and approval. The City shall not approve the final grading plans prior to receipt of this letter of commitment.  The City shall be willing to accept or work out other arrangements for long-term maintenance responsibility for portions of the levee on which it accepts public trails.	LTS
<b>F. Biological Resources</b>			
<u>BIO-1</u> : The proposed project would result in fill of approximately 1.75 acres of wetlands.	S	<u>BIO-1a</u> : The impact to wetlands from the Project River Trail shall be minimized by a design that minimizes fill. <u>BIO-1b</u> : Fill of wetlands shall be minimized during repair or reconstruction of the levee for the proposed Project River Trail. Repair or reconstruction of the levee shall be done in consultation with the CDFG, National Marine Fisheries Service, USFWS, and the Corps. The City shall sign off on Corps mitigation plans requiring "no net loss" of wetlands. <u>BIO-1c</u> : In areas where fairways span wetlands, fencing shall be provided to prevent entry into wetlands by golfers. Trails shall be routed across or around these wetlands to channel access within a small area. Tee areas, fairways, and holes shall be designed to minimize fill of wetland areas. <u>BIO-1d</u> : The minimum width possible for Stanly Lane shall be maintained at the crossings of the watercourses. <u>BIO-1e</u> : The grading plan shall be revised to avoid the wetland near the employee housing area. Best Management Practices (BMPs) shall be used to prevent sedimentation of this wetland during construction. (See the Hydrology, Drainage, and Water Quality section of Chapter IV for further explanation of BMPs.)	LTS

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Table II-1 *continued*

Impact	Level of Significance Prior to Mitigation	Mitigation Measure	Level of Significance After Mitigation
BIO-1 <i>continued</i>		<p><b>BIO-1f:</b> The minimum width possible shall be maintained for the crossing of the Central Swale by the Emergency Vehicle Access (EVA) road.</p> <p><b>BIO-1g:</b> Impacts to wetlands for boring of the sanitary sewer line and reclaimed water line shall be avoided if at all possible. Bore and jack methods shall be used wherever feasible. If impacts to wetlands cannot be avoided from the boring for these lines, an equivalent amount of uplands within the North or South Lowlands shall be converted into wetland. The City shall sign off on Corps mitigation plans requiring "no net loss" of wetlands (affected wetland to wetland mitigation area). A biologist experienced in conducting wetland delineations shall delineate the area of impact. BMPs shall be followed to prevent sedimentation of the wetland in the South Lowlands if there are unforeseen impacts related to boring.</p> <p><b>BIO-1h:</b> A Wetland Mitigation Plan based on the Conceptual Wetland Mitigation Plan (WRA, 1998b) shall be approved by the Army Corps of Engineers and signed off by the City prior to approval of the Grading Plan. At a minimum, this Wetland Mitigation Plan shall identify the following goals and objectives: location and size of all areas of fill; location and size of mitigation areas; planting plans and site preparation specifications; an implementation and monitoring plan; the management organization responsible for the plan; and cost estimates sufficient to cover the cost of implementing and maintaining the wetlands. This Plan shall also identify methods of wetland creation and types of wetlands to be created. All mitigation shall occur on-site at a minimum 1:1 ratio; higher mitigation ratios are encouraged. Preferred mitigation areas include conversion of uplands to lowlands in the North and South Lowlands (Note: Uplands are now present within the North and South Lowlands), and removal of fill from railroad crossings to improve wetland connections. Performance standards shall include criteria for evaluating whether goals of the Wetland Mitigation Plan are being achieved over time, plant cover values</p>	

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Table II-1 *continued*

Impact	Level of Significance Prior to Mitigation	Mitigation Measure	Level of Significance After Mitigation
BIO-1 <i>continued</i>		and the provision that the mitigation wetlands be dominated by native species. Cocklebur ( <i>Xanthium strumarium</i> ), spiny clotbur ( <i>Xanthium spinosum</i> ), broad-leaved pepper-grass ( <i>Lepidium latifolium</i> ), and any other noxious weed shall not comprise more than ten percent relative cover of the mitigation wetlands. The Wetland Mitigation Plan shall include monitoring for five years.	
BIO-2: The proposed project would also result in indirect impacts to wetlands. These indirect impacts would consist of the pollution of wetlands by pesticides, fertilizers, petroleum products, sedimentation, and refuse. The proximity of people to the wetlands of the North and South Lowlands also results in reducing their habitat value for wildlife.	S	<p><b>BIO-2a:</b> Mitigation Measure HYDRO-2 discussed in the Hydrology section of Chapter IV, shall be implemented to mitigate impacts from pollutants (pesticides, fertilizers, etc.) and sediment. Because the water quality impacts to receiving waters cannot be guaranteed to be less than significant after mitigation, this impact would remain potentially significant.</p> <p><b>BIO-2b:</b> A 100+ foot wide buffer shall be maintained between the edge of golf course landscaping (including any golf course path), and South Lowlands wetland areas for at least 90 percent of the length of the golf course. For 10 percent of this length, reductions may be approved by CDFG in exchange for added landscaping or other enhancements, but in no case shall the buffer be less than 50 feet. The buffer shall be a component of the site's natural open space and shall be designed to function as wildlife habitat; people shall be excluded from the buffer area.</p> <p>The buffer shall be planted with trees and shrubs to screen people from the wetlands and to provide cover for wildlife escaping the Lowlands areas during flooding. Suitable trees would include those native trees already growing on the Stanly Ranch. These species include coast live oak, black oak, valley oak, black walnut, and California buckeye. Suitable shrubs include snowberry (<i>Symphoricarpus albus</i>) (if beneath the tree canopy), California rose (<i>Rosa californica</i>), California lilac (<i>Ceanothus thrysiflorus</i>), coffeeberry (<i>Rhamnus californica</i>), coyote brush</p>	PS

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Table II-1 *continued*

Impact	Level of Significance Prior to Mitigation	Mitigation Measure	Level of Significance After Mitigation
BIO-2 <i>continued</i>		<p>(<i>Baccharis pilularis</i>), red berry (<i>Rhamnus crocea</i>), toyon (<i>Heteromeles arbutifolia</i>), California blackberry (<i>Rubus ursinus</i>), and Eastwood's manzanita (<i>Arctostaphylos glandulosa</i>). Herbaceous species, such as fathen, shall be planted at the margin of the wetland to further increase the cover of the vegetation and increase the effectiveness of the vegetational screen for wildlife (especially salt marsh harvest mice).</p> <p><u>BIO-2c:</u> Paths to and from golf course holes 11 and 13 shall be developed and fenced to maintain the greatest buffer width possible, but no less than 100 feet wide, between wetlands and the golf course. Signs shall explain the sensitive nature of the wetlands, the importance of the buffer, and the role of buffer plantings.</p> <p><u>BIO-2d:</u> The proposed Project River Trail Northerly Loops (Loops 1N and 2N) shall be located inland from the edge of the levee approximately 100 feet where possible in order to permit and provide a buffer between people (and potentially their pets) and the wildlife of the wetlands/river.</p> <p><u>BIO-2e:</u> The Project River Trail shall provide native landscape buffers wherever possible to reduce impacts of human intrusion on wildlife habitat. Such landscaping shall be included in the final Wetland Mitigation Plan and incorporated into the final design. Buffer plants shall be selected from the list in Mitigation Measure BIO-2b above or similar appropriate native species matched with proper site and planting conditions.</p> <p><u>BIO-2f:</u> In an appropriate location or locations, signs shall explain the sensitive nature of wetlands, the importance of staying on the designated trail or golf cart path, and the role of buffer plantings.</p> <p><u>BIO-2g:</u> Project River Trail operating rules shall prohibit dogs or require that dogs be kept on a leash.</p> <p><u>BIO-2h:</u> Mitigation Measure HYDRO-2 shall be implemented to reduce trail construction sedimentation impacts.</p>	

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Table II-1 *continued*

Impact	Level of Significance Prior to Mitigation	Mitigation Measure	Level of Significance After Mitigation
BIO-2 <i>continued</i>		BIO-2i: Dense riparian plantings shall be established on the banks of the drainages that cross the panhandle and the proposed vineyard on the east side of the highway. These plantings shall occur in two bands, each band on either side of each drainage. These bands shall be 50-feet wide beginning from the top of each bank. The species listed in the <i>Riparian Enhancement Plan for Stanly Ranch, Napa, California</i> are suitable for planting along these drainages. Planting shall stop where the salinity of the soil of the North Lowlands hinders growth.	
BIO-3: Blue gum eucalyptus trees are proposed for removal along Stanly Lane and Old Suscol Road and from the interior of the site. Several species of native trees are also proposed for removal along Stanly Lane. The removal of eucalyptus and native trees would remove nesting, perching, and foraging habitat for raptors and songbirds.	S	<p>BIO-3a: Three native trees shall be planted for every native tree removed due to widening of Stanly Lane. Replanted trees shall be the same species as each tree that is removed. Planting of these trees shall occur along the drainages crossed by Stanly Lane in the panhandle. Coordination shall occur between implementing this mitigation measure and Mitigation Measure BIO-2b.</p> <p>BIO-3b: The applicant shall implement the tree replanting plan, including tree rows along both sides of Stanly Lane and Old Suscol Road. Mitigation Measures BIO-2i, BIO-4, and BIO-11 shall also be implemented to partially mitigate loss of raptor perching, foraging and nesting habitat.</p>	LTS
BIO-4: Removal of on-site trees may result in direct impacts to nesting raptors.	S	BIO-4: From February through July, a pre-construction survey shall be conducted for nesting raptors within 30 days of construction to determine if raptors are nesting in trees slated for removal. Buffers 100 feet wide shall be established around each active nest encountered during the pre-construction survey. These buffers shall be maintained until the young have fledged.	LTS
BIO-5: The proposed project would remove a stand of California oatgrass grassland, a sensitive habitat type, approximately 37,400 square feet (0.86 acre) in size.	S	BIO-5: An equivalent amount of California oatgrass grassland shall be established on the project site to mitigate for the stand removed by the project. The North Lowlands appears to provide suitable soils and hydrology for California oatgrass. Candidate mitigation areas shall not be dominated by native plant species because removal of native plant habitat could constitute a significant impact.	LTS

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Table II-1 *continued*

Impact	Level of Significance Prior to Mitigation	Mitigation Measure	Level of Significance After Mitigation
<u>BIO-6</u> : Impacts to Mason's lilaeopsis, a State-listed, rare plant species, could result from repair of the levee along the Napa River or from construction of a trail along the top of the levee.	S	<u>BIO-6a</u> : Prior to construction of any trail or repair of any portion of the levee along the Napa River, surveys shall be carried out for Mason's lilaeopsis. Site conditions (area of stand, number of plants, plant cover, associated species, topography, tidal regime, etc.) shall be documented for each of the stands of Mason's lilaeopsis encountered. Construction shall avoid impacts to stands of Mason's lilaeopsis. These stands shall be fenced and the fenced areas noted on project grading plans as areas to be protected. Any stands of Mason's lilaeopsis adversely affected or destroyed by construction shall be replaced. A plan to replace the stand(s) shall be developed in consultation with and approved by the California Department of Fish and Game (CDFG).	LTS
		<u>BIO-6b</u> : Any soils from project construction shall not be pushed onto stands of Mason's lilaeopsis. Contractors shall be made aware of this condition by way of established construction standards.	
		<u>BIO-6c</u> : The proposed Project River Trail Northerly Loop 1N and Future Southerly Loop shall be located inland from the edge of the levee approximately 100 feet where possible in order to minimize potential impacts on Mason's lilaeopsis.	
<u>BIO-7</u> : Impacts to nesting salt marsh common yellowthroat, a special status species, could result from repair of the levee along the Napa River or from construction of a trail along the top of the levee.	S	<u>BIO-7a</u> : Prior to construction of any trail or repair of any portion of the levee along the Napa River, surveys shall be carried out for nesting salt marsh common yellowthroats. Construction shall avoid impacts to nests of salt marsh common yellowthroats. These nests shall be fenced and a 100 foot buffer established around the nest location. The nest(s) shall be noted on project grading plans.	LTS
		<u>BIO-7b</u> : Any soils from project construction shall not be pushed into areas supporting nests of salt marsh common yellowthroats. Contractors shall be made aware of this condition by way of established construction standards.	

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Table II-1 *continued*

Impact	Level of Significance Prior to Mitigation	Mitigation Measure	Level of Significance After Mitigation
<u>BIO-8</u> : Impacts to listed fish species (tidewater goby, winter-run chinook salmon, coho salmon, Central California steelhead and delta smelt) could result from repair of the levee along the Napa River or from construction of a trail along the top of the levee.	S	<p><u>BIO-8a</u>: Prior to construction of any trail or repair of any portion of the levee along the Napa River, consultation shall occur with CDFG, National Marine Fisheries Service, USFWS, and the Corps. Measures to minimize impacts to the Napa River adjacent to wetlands and to limit the generation of silt shall be instituted as described in mitigation measures for Impacts BIO-1, BIO-2 and HYDRO-2.</p> <p><u>BIO-8b</u>: Best Management Practices (BMPs) shall be implemented to reduce the amount of silt produced. Because the water quality impacts to receiving waters and the fish cannot be guaranteed to be less than significant after mitigation, this impact would remain potentially significant.</p>	PS
<u>BIO-9</u> : Impacts to special status fish species (longfin smelt, green sturgeon, river lamprey, Pacific lamprey, and Sacramento splittail) could result from repair of the levee along the Napa River or from construction of a trail along the levee.	S	<p><u>BIO-9a</u>: Prior to construction of any trail or repair of any portion of the levee along the Napa River, consultation shall occur with CDFG, National Marine Fisheries Service, USFWS, and the Corps. Measures to minimize impacts to wetlands and to limit the generation of silt shall be instituted as described in mitigation measures for Impacts BIO-1, BIO-2 and HYDRO-2.</p> <p><u>BIO-9b</u>: BMPs shall be implemented to reduce the amount of silt produced. The applicant shall avoid disturbance to the water of the Napa River and shall time construction to avoid impacts during spawning.</p>	LTS
<u>BIO-10</u> : Impacts could occur to salt marsh harvest mice, a listed and fully protected species present in the South Lowlands, due to increased human activity and predation due to house cats kept as pets by the residents.	S	<p><u>BIO-10a</u>: Mitigation Measure BIO-2b shall be implemented. The required buffer shall provide sufficient cover to hide salt marsh harvest mice especially when their habitat is flooded for a month or more during the winter.</p> <p><u>BIO-10b</u>: The Future Southerly Loop trail alignment shall be revised in the southwestern corner of the railroad bed to trend northwesterly around existing wetlands, then back south at the west edge of the property line to provide a minimum 100-foot buffer distance to salt marsh harvest mouse habitat. This would necessitate a minor revision to proposed lots in Neighborhood 4 and minor wetland fill at the western edge of the property to reconnect this future trail back to the railroad bed.</p>	LTS

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Table II-1 *continued*

Impact	Level of Significance Prior to Mitigation	Mitigation Measure	Level of Significance After Mitigation
BIO-10 <i>continued</i>		<u>BIO-10c</u> : No temporary staging areas, stockpiling of equipment or construction materials, placement of any dredge or fill material, or artificial lighting, shall occur in or impinge upon the South Lowlands wetland areas unless approved by the USFWS.	
		<u>BIO-10d</u> : A predator management plan shall be prepared by the project applicant, which shall include, but not be limited to, adequate funding for U.S. Department of Agriculture Wildlife Service personnel to conduct predator management.	
		<u>BIO-10e</u> : A plan shall be implemented, in coordination with the USFWS, to restrict public access (e.g. use of fences, barriers, landscaping, and signs) to the maximum extent feasible in the South Lowlands. The plan shall incorporate the Project River Trail alignment. The plan must be reviewed and approved by USFWS prior to initial project occupancy.	
		<u>BIO-10f</u> : The following activities shall be prohibited in the South Lowland wetland areas: 1) alteration of existing topography except for the minimum needed for levee maintenance or implementation of a wetland restoration plan approved by the USFWS; 2) placement of any new project-related structure unless approved by the USFWS; 3) dumping or burning of any garbage, waste, or fill material unless approved by the USFWS; 4) killing, removing, alteration, or replacement of any existing native vegetation unless approved by the USFWS; and 5) use of any pesticides or herbicides unless approved by the USFWS.	
		<u>BIO-10g</u> : Habitat of the salt marsh harvest mouse shall be improved by increasing the drainage from the South Lowlands. This increased drainage shall occur by adding culverts that would drain the South Lowlands area. The culverts shall have flap gates that would prevent water from entering the South Lowlands from the Napa River.	

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Table II-1 *continued*

Impact	Level of Significance Prior to Mitigation	Mitigation Measure	Level of Significance After Mitigation
<b>BIO-11:</b> Project-related activities may result in impacts to special status species (nesting short-eared owl, northern harrier, western burrowing owl, and California horned lark).	S	<b>BIO-11:</b> Pre-construction surveys shall be conducted within a period of 30 days prior to construction to determine if these species have colonized the site. Surveys for western burrowing owls shall follow CDFG burrowing owl survey protocol. If construction is proposed during the breeding season and these species occupy the site, a buffer 200-feet wide shall be established around nests for northern harrier and short-eared owl, and buffers 100 feet wide around nests for western burrowing owl and California horned lark.	LTS
<b>BIO-12:</b> Project-related activities may result in impacts to various sensitive bat species.	S	<b>BIO-12:</b> Pre-construction surveys shall be conducted within 30 days prior to removal of any existing buildings to determine if any special status bat species have colonized the site. If construction is proposed during the breeding season, and breeding colonies have colonized the site, the habitat of the breeding colonies shall not be destroyed during the time that the bats are present. After the young are independent and the colony is no longer using the buildings, the buildings can be removed.	LTS
<b>BIO-13:</b> Proposed development may prevent the movement of wildlife to and from the Napa River (common deer, raccoons, etc.).	S	<b>BIO-13:</b> Corridors shall be planted across the site to allow the movement of wildlife from the Napa River to upland areas beyond the Stanly Ranch site. Upland corridor plantings shall occur along the project site border at Neighborhood 4 and extend along the border to the Bay Trail. These plantings shall be at least 15 to 50 feet wide. Other wildlife corridors include the drainageways described in BIO-2i where planted areas along the drainages shall average 50 feet on each side.	LTS

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Table II-1 *continued*

Impact	Level of Significance Prior to Mitigation	Mitigation Measure	Level of Significance After Mitigation
<b>G. Historic and Cultural Resources</b>			
HIS-1: Unanticipated discovery of archaeological resources could occur with development proposed as part of the <i>Draft SRSP</i> .	S	<u>HIS-1a</u> : A project archaeologist shall be hired for the construction phase of the project. A plan for further necessary evaluation shall be developed by the project archaeologist after review of construction plans which clearly outlines potential impacts to these resources. Mechanical trenching shall be undertaken in areas of former structures and in or around the locations of existing structures after their removal to locate actual historical material deposits or architectural features. Through this process, the presence or absence of related deposits can be demonstrated, and where located, the aerial extent and depth of the deposit mapped.	PS
		<u>HIS-1b</u> : In those cases where deposits or other forms of historical information are located <u>and</u> where project-related impacts would unavoidably occur, evaluative testing of the deposits shall be undertaken to identify resources and demonstrate significance. This testing can take the form of a combination of mechanical soil removal and hand excavation. Following completion of this identification and evaluation phase, full recording of all cultural resources shall be conducted. Mitigation of impacts to a less-than-significant level would depend upon a number of factors including a determination of whether the resource qualifies as "historical" under CEQA. If any archaeological materials or objects are unearthed during project construction, all work in the vicinity shall immediately halt until a qualified archaeologist is retained to evaluate the finds. The developer shall comply with all mitigation recommendations of the archaeologist prior to commencing work in the vicinity of the archaeological finds.	

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Table II-1 *continued*

Impact	Level of Significance Prior to Mitigation	Mitigation Measure	Level of Significance After Mitigation
HIS-1 <i>continued</i>		<p><b>HIS-1c:</b> If subsurface prehistoric or historic deposits containing human remains are discovered during earth moving activities, the find shall be considered significant and shall be reported to the County Coroner. All work in the vicinity shall immediately halt until a qualified archaeologist is retained to evaluate the finds. Responsibility for human remains discovered during project activities comes under the jurisdiction of the County Coroner and disposition is governed by the provisions of Section 5097.94 and 5097.98 of the Public Resources Code. If the remains are Native American, the Coroner is responsible for contacting the Native American Heritage Commission (NAHC). The developer shall comply with all mitigation recommendations of the archaeologist prior to commencing work in the vicinity of the archaeological finds.</p> <p>This impact would remain potentially significant because if any archaeological remains qualify as historic resources, recordation accompanied by destruction of the resource would not constitute mitigation.</p>	
<p><b>HIS-2:</b> The <i>Draft SRSP</i> proposes that the Stanly House be given to any person or organization willing to move the house from the Stanly Ranch and rehabilitate it. In the absence of a party willing to move the house, it would be demolished. Relocation to a location outside the Stanly Ranch or demolition of the house would result in a significant unavoidable impact because it appears to be eligible for the National Register of Historic Places and the California Register of Historical Resources.</p>	S	<p><b>HIS-2a:</b> The Stanly House shall be rehabilitated and occupied in its historic location, rather than being demolished and replaced with a new building. Rehabilitation of the building would be consistent with <i>The Secretary of Interior Standards for Rehabilitation and Guidelines for Rehabilitation of Historic Buildings</i> published by the U.S. Department of Interior (1992). This mitigation measure would reduce the impact to a less-than-significant level.</p>	<p>(SU or LTS, depending upon mitigation selected. Mitigation Measures 2a or 2b would reduce the impact to LTS.)</p>

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Table II-1 *continued*

Impact	Level of Significance Prior to Mitigation	Mitigation Measure	Level of Significance After Mitigation
HIS-2 <i>continued</i>		<p><u>HIS-2b:</u> If Mitigation Measure HIS-2a above is not implemented, the Stanly House shall be moved to a different location on the Stanly Ranch, and the building rehabilitated according to <i>The Secretary of Interior Standards for Rehabilitation and Guidelines for Rehabilitation of Historic Buildings</i>. If the building is moved from its original location, the new location must be appropriate to the historic character of the building. The project sponsor shall guarantee the building will be rehabilitated and occupied, and thus it will not be abandoned and allowed to deteriorate further in its new location. This mitigation measure would reduce project impacts to a less-than-significant level.</p> <p>The feasibility of moving the Stanly House has not been determined, and is beyond of the scope of this analysis. The feasibility of moving the building can only be determined by a contractor or engineer experienced in moving historic buildings. Although a wood-frame building like the Stanly House can usually be moved without difficulty, the house's structural condition needs to be evaluated to determine if the house can be moved and not significantly damaged.</p> <p>The following mitigation measures, alone or in combination, would not mitigate this impact to a less-than-significant level. However, they would help to reduce the impact if the Stanly House is not rehabilitated and retained on the Stanly Ranch. If the Stanly House is moved intact from the Stanly Ranch (Mitigation Measure HIS-2c), the salvage activities described in Mitigation Measure HIS-2e would not be necessary.</p>	

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Table II-1 *continued*

Impact	Level of Significance Prior to Mitigation	Mitigation Measure	Level of Significance After Mitigation
HIS-2 <i>continued</i>		<p><u>HIS-2c:</u> If Mitigation Measures HIS-2a and HIS-2b are not implemented, the Stanly House shall be moved to a location not on the Stanly Ranch, and the building rehabilitated according to <i>The Secretary of Interior Standards for Rehabilitation and Guidelines for Rehabilitation of Historic Buildings</i>. If the building is moved from its original location, the new location must be appropriate to the historic character of the building. The project sponsor shall guarantee the building will be rehabilitated and occupied, and thus it will not be abandoned and allowed to deteriorate further in its new location. Because the Stanly House possesses significant associations with the history of the Stanly Ranch and with John Stanly, a person significant in local history, moving the house to a site off the Stanly Ranch would not reduce project impacts to a less-than-significant level.</p> <p><u>HIS-2d:</u> Prior to demolishing, salvaging or moving the Stanly House off the Stanly Ranch, the building shall be documented according to the Outline Format described in the <i>Photographic Specifications</i> and <i>The Guidelines for Preparing Written and Descriptive Data: Historic American Building Survey</i> (HABS) published by the Pacific West Region Office (in San Francisco) of the National Park Service. This documentation shall include archival quality, large format (minimum 4 by 5 inch) photographs of the exterior and interior of the building. Sketch floor plans shall also be included as part of the HABS documentation. A copy of the documentation, with original photo negatives and prints, shall be donated to an historical archive accessible to the public, such as the Napa County Historical Society, or other suitable local history collection. The HABS documentation of the Stanly House would reduce project impacts, but not to a less-than-significant level.</p>	

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Table II-1 *continued*

Impact	Level of Significance Prior to Mitigation	Mitigation Measure	Level of Significance After Mitigation
HIS-2 <i>continued</i>		<p><u>HIS-2e:</u> The preservation of architecturally distinguished or historically significant features of the Stanly House (fireplaces, wall brackets, etc), and the incorporation of these features into the design of a new building proposed for the Stanly Ranch, would reduce project impacts. Salvaging these features in a building not on this parcel (such as in a museum display or in another historic building) would reduce project impacts. However, it would be preferable to have the features preserved in the historic location. If the building is to be demolished, representatives of the Napa County Historical Society, Napa County Landmarks and the Napa Cultural Heritage Commission, and other interested parties shall be contacted and given the opportunity to examine the building and provide suggestions for salvaging these elements in other buildings.</p> <p>Project impacts would be reduced commensurate with the percentage of the existing building that can be reused or otherwise preserved. The preservation of one or more of the significant interior and exterior features from the existing building as part of a new building would reduce project impacts, but not to a less-than-significant level since the Stanly House would be largely demolished. The preferred alternative from the standpoint of historic values would be to preserve as much of the original building as possible on its historic site.</p> <p><u>HIS-2f:</u> An exhibit on the history of the Stanly Ranch could be included in one of the new buildings constructed under the <i>Draft SRSP</i>. The material assembled for the HABS documentation (see Mitigation Measure HIS-2d) of the Stanly Ranch could be used in such an exhibit. The exhibit shall reduce the project impacts, but not to a less-than-significant level. Combined with Mitigation Measures HIS-2c, HIS-2d, and HIS-2e above, this mitigation measure would further reduce the impacts of the project.</p>	

S: Significant; LTS: Less Than Significant; PS: Potentially Significant; SU: Significant Unavoidable

Table II-1 *continued*

Impact	Level of Significance Prior to Mitigation	Mitigation Measure	Level of Significance After Mitigation
<u>HIS-3</u> : Of the 2,800 eucalyptus trees along Stanly Lane and Old Suscol Road, about 2,600 trees would be removed and 200 trees retained.	S	<p><u>HIS-3a</u>: The blue gum eucalyptus along Stanly Lane and Old Suscol Road shall be replaced with a similar species of eucalyptus. Given that over 600 species of eucalyptus exist, an historical horticulturist shall be consulted to evaluate the feasibility of replacing the blue gum eucalyptus with a similar species of eucalyptus. National Register Bulletin 30 – <i>Guidelines for Evaluating and Documenting Rural Historic Landscapes</i> – recognizes that the issue of the historic integrity of vegetation in an historic landscape “presents a complex problem” (see U.S. Department of Interior 1990:22-23). Since “plants do not remain static but change over time,” <i>Bulletin 30</i> indicates that while “original plant material may enhance integrity, <i>their loss does not necessarily destroy it</i>” (emphasis added). Consequently, Bulletin 30 states that if the historic landscape retains “vegetation similar to the historic species in scale, type, and visual effect,” the landscape “can retain integrity of setting.” Although only about 300 trees planted in the 19th century survive, the overall form and feeling of this landscape feature retains integrity because subsequent plantings have maintained the eucalyptus windrows. Consequently, replacing the existing eucalyptus with the same or similar species would retain the historic integrity of this landscape feature. This mitigation measure would reduce project impacts to a less-than-significant level.</p> <p>The following mitigation measures, which can be adopted alone or in combination, would not reduce the impact to a less-than-significant level but are recommended in the event that Mitigation Measure HIS-3a is not implemented. If any of the mitigation measures below are selected without Mitigation Measure HIS-3a, the impact would remain significant.</p>	(SU-LTS: Depending on the mitigation selected. Mitigation Measure HIS-3a would reduce the impact to LTS.)

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Table II-1 *continued*

Impact	Level of Significance Prior to Mitigation	Mitigation Measure	Level of Significance After Mitigation
HIS-3 <i>continued</i>		<p><u>HIS-3b:</u> The blue gum eucalyptus along Stanly Lane and Old Suscol Road could be replaced with a non-eucalyptus tree species, but a tall, vertical tree with dense, green foliage like the eucalyptus should be selected. A tree species used during the 19th century for windrows would not be appropriate since it would create a false sense of historic development. The <i>Secretary of Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings</i> (1995) (hereinafter referred to as The Standards) discourage creating a false sense of historic development in restoring historic buildings and landscapes. In regards to restoring historic landscapes, guidelines discouraging creating a false sense of historic development have been further elaborated in the recently published <i>Secretary of Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes</i> (1996). The Proposed CEQA Guidelines (Section 15064.5) indicate that a project consistent with the Standards will mitigate significant impacts. This mitigation measure would reduce project impacts somewhat, but not to a less-than-significant level.</p> <p><u>HIS-3c:</u> Before large numbers of trees are removed, Stanly Lane and Old Suscol Road shall be photographically documented according to the <i>National Register Bulletin 30 - Guidelines for Evaluating and Documenting Rural Historic Landscapes</i> and the <i>Photographic Guidelines</i> for the Historic American Building Survey. The documentation shall include archival quality, large format (minimum 4 by 5 inch) photographs of a variety of views of the two roads. Maps and aerials of the roads shall also be included as part of the documentation. A copy of the documentation, with original photo negatives and prints, shall be</p>	

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Table II-1 *continued*

Impact	Level of Significance Prior to Mitigation	Mitigation Measure	Level of Significance After Mitigation
HIS-3 <i>continued</i>		<p>donated to an historical archive accessible to the public, such as the Napa County Historical Society, or other suitable local history collection. By itself, the historic documentation of Stanly Lane and Old Suscol Road would not reduce project impacts to a less-than-significant level. Combined with Mitigation Measure HIS-3b, this Mitigation Measure would further reduce the impacts of the project.</p> <p><u>HIS-3d:</u> The applicant shall include an exhibit on the history of the Stanly Ranch in one of the new buildings constructed on site as referred to in Mitigation Measure HIS-2f. This mitigation measure can be combined with Mitigation Measures HIS-3b and HIS-3c above to further reduce the impacts of the project.</p>	
<p><u>HIS-4:</u> The project would reuse the cistern as part of a spa proposed for the project. Plans and specifications have not been developed for the spa design and the reuse of the cistern. Assuming the cistern can be preserved intact in its reuse as part of the spa, this aspect of the project would not have a significant effect. If the cistern is demolished or substantially altered as part of building the spa, this aspect of the project would have a significant effect.</p>	S	<p><u>HIS-4a:</u> Prior to demolishing or salvaging parts of the cistern, it shall be documented according to the Outline Format described in the Guidelines for the Historic American Building Survey (HABS) published by the Western Regional Office of the National Park Service. This documentation shall include archival quality, large format (minimum 4 by 5 inch) photographs of the exterior and interior of the building. A sketch plan will also be included as part of the HABS documentation. A copy of the documentation, with original photo negatives and prints, should be donated to an historical archive accessible to the public, like the Napa County Historical Society, or other suitable local history collection.</p> <p><u>HIS-4b:</u> The applicant shall preserve any features or materials of historic interest in the cistern. Salvaging these features in a building not on the Stanly Ranch (such as in a museum display or in another historic building) would reduce project impacts less than having the features preserved in their historic location. If the cistern is to be demolished, the applicant shall contact representatives of the Napa County Historical Society, Napa County Landmarks and the Napa Cultural Heritage Commission, and other interested parties. The representatives of these groups shall have an opportunity to examine the cistern and provide suggestions for salvaging elements.</p>	PS

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Table II-1 *continued*

Impact	Level of Significance Prior to Mitigation	Mitigation Measure	Level of Significance After Mitigation
HIS-4 <i>continued</i>		<p><u>HIS-4c:</u> The applicant shall include an exhibit on the history of the Stanly Ranch in one of new buildings constructed on site as referred to in Mitigation Measure HIS-2f. This mitigation measure can be combined with Mitigation Measures HIS-4a and HIS-4b above to further reduce the impacts of the project.</p> <p>The above mitigation measures would reduce project impacts, but any action other than preserving the cistern in its current location would result in a potentially significant impact. Such preservation cannot be guaranteed at this time.</p>	
<b>H. Visual Quality</b>			
<u>VIS-1:</u> The size and location of the proposed Stanly Ranch development would result in a major change in visual character in an area of agricultural, open space, and rural residential uses. The project has the potential to be inconsistent with the character, scale, massing, bulk, and form of surrounding development and would result in a significant impact.	S	<u>VIS-1:</u> This impact would remain significant and unavoidable. However, it is noted that many of the following visual mitigation measures would reduce the effects of this impact.	SU
<u>VIS-2:</u> The project could conflict with visual-related policies of the City's adopted <i>General Plan</i> and <i>Draft General Plan</i> .	S	<u>VIS-2:</u> To bring the project into consistency with existing General Plan Open Space Policy C2, the applicant shall implement Mitigation Measure POL-1h which requires elimination of the easternmost six townhomes and the proposed easternmost row of homes on Home Hill (Neighborhood 2) from the northern subdivision edge to the second cul-se-sac/circle, and replanting of this area with a new tree grove comprised of native and ornamental species of sufficient height and width to screen two-story homes within five years of planting.	LTS

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Table II-1 *continued*

Impact	Level of Significance Prior to Mitigation	Mitigation Measure	Level of Significance After Mitigation
<p><b>VIS-3:</b> Implementation of the proposed project could adversely affect views of the site from SR 29/12 and SR 12/121 which are proposed as scenic corridors in the <i>Draft General Plan</i>. The project's reduced screening along a proposed scenic corridor could result in a significant visual impact until replanted trees called for in the Windrow Replanting Plan are large enough to begin to replace the "greenway corridor" and screening provided by the existing eucalyptus. After five to ten years, screening should be adequate and the impact would be less-than-significant. The tree replanting plan would be expected to provide an attractive landscape over the longer term along the highway corridor.</p>	<p>S (Short Term) LTS (Long Term)</p>	<p><b>VIS-3a:</b> To provide screening of Home Hill residences from northbound SR 29, the applicant shall implement Mitigation Measure VIS-2.</p>	<p>SU (Short Term) LTS (Longer Term [after 5-10 years])</p>
		<p><b>VIS-3b:</b> To recreate the scenic "greenway" corridor along SR 29 and provide screening of the site, the <i>Draft SRSP</i> shall be revised prior to adoption to incorporate the proposed Windrow Replacement and Management Plan (EDAW Inc., et al., 1998) and the applicant shall implement tree plantings as early as possible in Phase 1 of the project.</p>	
		<p><b>VIS-3c:</b> Additional tree plantings shall be added southeast of the golf clubhouse, resort lodge, nearest guest cottages to the east, and spa to provide long-term screening of these buildings from view from SR 29/12. New trees shall also be added at the northeast end of Neighborhood 1 to better screen it from view for northbound motorists on SR 29/12. Plantings shall be consistent with those recommended in the replanting plan for these locations.</p>	
		<p><b>VIS-3d:</b> The applicant shall secure an encroachment permit from Caltrans and, as soon as possible following approval of the <i>Draft SRSP</i>, plant additional trees within the wide Caltrans right-of-way in the areas described below to maximize screening of proposed resort and residential areas from the view of southbound motorists. Tree plantings close to the travel lanes would be particularly helpful south of the central swale in screening the employee housing area and golf maintenance yard, and to better screen homes in Neighborhood 1. North of the central swale, added trees planted east of the retained eucalyptus would add to the screening of the resort area.</p>	
		<p><b>VIS-3e:</b> Final design plans for the winery and wine center shall: 1) include additional tree plantings on the north and east sides of the wine center and winery; and 2) provide equal attention to design of all facades to provide an exceptional design.</p>	

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Table II-1 *continued*

Impact	Level of Significance Prior to Mitigation	Mitigation Measure	Level of Significance After Mitigation
VIS-3 <i>continued</i>		<p><u>VIS-3f</u>: Prior to adoption, the <i>Draft SRSP</i> shall be revised to include specific measures regarding design review as described in Mitigation Measure VIS-4.</p> <p><u>VIS-3g</u>: All new utilities proposed as a result of the proposed project shall be undergrounded.</p>	
<u>VIS-4</u> : The proposed project could result in significant visual impacts if not subject to appropriate design review and if the <i>Draft SRSP Design Guidelines</i> are not properly implemented.	S	<u>VIS-4</u> : The City shall ensure that the <i>Design Guidelines</i> of the <i>Draft SRSP</i> and visual mitigation measures or conditions of approval are implemented prior to the issuance of building permits. To ensure compliance given the sensitivity of this project, the Planning Commission shall be responsible for design review prior to issuance of building permits for major project components: the highly visible winery and wine center, the resort lodge, golf clubhouse, golf maintenance facility and major parking lots, initial residential subdivisions and initial resort unit designs, and the employee housing complex. The applicant shall secure separate architectural review approval for any signage for the project.	LTS
<b>I. Population, Employment, and Housing</b>			
<i>Based on the criteria of significance, no impacts would be significant.</i>			
<b>J. Public Services</b>			
<u>SER-1</u> : At buildout, the proposed project would increase demands for police service beyond current capabilities.	S	<p><u>SER-1a</u>: Consistent with the NPD Police Chief's recommendations, no gate shall be placed at the greeting station at the intersection of Old Suscol Road and Stanly Lane. Alternatively, if a gate is ever proposed, it shall be manned. Security gates may be considered at the entrance of private roads branching off of Old Suscol Road. The applicant may desire to construct a gate at the northern entrance to the resort homes.</p> <p><u>SER-1b</u>: The Stanly Ranch project shall be patrolled by high quality, on-site, around-the-clock security to meet the recommendations of the NPD.</p> <p><u>SER-1c</u>: The Declaration of Establishment of Conditions and Restrictions (CC&amp;R's) shall include the ability for private security to levee fines to enforce parking and speeding problems because on-site streets would be private.</p>	LTS

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Table II-1 *continued*

Impact	Level of Significance Prior to Mitigation	Mitigation Measure	Level of Significance After Mitigation
<p><u>SER-2:</u> The proposed project would be located outside of the established response time standard for firefighting services as provided by existing City staff and equipment.</p>	S	<p><u>SER-2a:</u> The project applicant shall pay for the construction of a new fire station to serve the project either on-site or on City-owned property north of the project site. This payment would offset any obligation for payment of Fire and Paramedic Development fees for fire station construction elsewhere in the City.</p>	LTS
		<p><u>SER-2b:</u> The project applicant shall ensure adequate access to the site for emergency and fire vehicles in accordance with the Napa City Fire Code and standards and Public Works Department standards. This access shall be clearly identified as part of the tentative subdivision maps.</p>	
		<p><u>SER-2c:</u> The applicant shall comply with all applicable requirements of the Uniform Fire Code, the Fire Department and PWD Standard Specifications and the Fire Department "Standard Requirements for Commercial/Residential Projects," including, without limitation, the requirements for access, new construction, smoke detectors, etc. Existing fire hydrants may be used to meet hydrant location requirements only if they meet or are changed to meet current hydrant specifications.</p>	
		<p><u>SER-2d:</u> Properties having common ownership shall provide the Fire Department with a notarized copy of the recorded CC&amp;R's in a form satisfactory to the City Attorney ensuring that all components of fire protection system(s) and fire access roads will be maintained by a maintenance district, owner's association, or similar legally-responsible entity.</p>	
		<p><u>SER-2e:</u> All newly constructed buildings shall have automatic sprinkler systems conforming to NFPA and City Standard Specifications, for which an installation permit must be obtained from Fire Prevention. In multi-unit complexes, or in buildings with three or more stories, special monitoring conditions shall be required. Existing habitable buildings which are retained shall be retrofitted.</p>	

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Table II-1 *continued*

Impact	Level of Significance Prior to Mitigation	Mitigation Measure	Level of Significance After Mitigation
SER-2 <i>continued</i>		<u>SER-2f</u> : The applicant of any project proposing a change in occupancy use classification (as defined in the UBC Table 5A) in a building protected by automatic fire sprinklers shall have the sprinkler system evaluated by a licensed fire sprinkler contractor or fire protection engineer for compliance with National Fire Protection Association Installation Standards. A written report of the inspection findings shall be submitted to the Fire Department prior to final occupancy clearance. A permit is required from Fire Prevention for sprinkler system alterations.	
		<u>SER-2g</u> : The developer for any project which proposes commercial occupancies shall secure approval from Fire Prevention and Building Departments prior to signing lease agreements and allowing occupancy of prospective occupants that pose possible fire and life safety hazards or are classified by the UBC as an H (Hazardous) occupancy.	
<u>SER-3</u> : Development of Stanly Ranch would result in an increase in demand on parks and recreational facilities.	S	<u>SER-3a</u> : The Stanly Ranch shall assist the City in meeting adopted parks and recreation policies and standards through dedication and construction of the Bay Trail and the River Trail Northerly Loops, and dedication of the Southerly Loop.	LTS
		<u>SER-3b</u> : Developer shall pay the required fees for each new dwelling unit in accordance with Napa Municipal Code (NMC) 15.68. Such fee shall be payable at the rate in effect at the time of payment for the unit involved. The findings set forth in such chapter and Resolution 92-084 are incorporated herein. The City further finds that calculation of the fee due pursuant to the formula set forth in NMC Section 15.68.040 demonstrates there is a reasonable relationship between the fees imposed and cost of the improvements attributable to this project.	

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Table II-1 *continued*

Impact	Level of Significance Prior to Mitigation	Mitigation Measure	Level of Significance After Mitigation
SER-3 <i>continued</i>		<u>SER-3c:</u> Unless project approval requires only land dedication, the Developer shall pay the required fees for each new dwelling unit in accordance with and for the purposes of NMC Sections 16.32.040, NMC 15.68.010 and 15.68.090 for each residential unit authorized or allowed by project approval. Such fee(s) shall be payable at the rate in effect at the time of payment for the unit involved. The findings set forth in such chapter and Resolution 92-084 are incorporated herein. The City further finds that calculation of the fee due pursuant to the formula set forth in NMC Section 15.68.040D demonstrates there is a reasonable relationship between the fees imposed and cost of the improvements attributable to this project.	
<b>K. Public Utilities</b>			
<u>UTIL-1:</u> The proposed project would increase the City of Napa's water supply deficit during drought conditions if the project's proposed water savings plan were not fully implemented or completely effective.	S	<u>UTIL-1:</u> The following combination of mitigation measures shall be implemented: <ul style="list-style-type: none"> <li>(a) Policy 1.9 of the <i>Draft SRSP</i> shall be revised, prior to adoption of the <i>Final SRSP</i>, to require the use of reclaimed water for irrigation of the neighborhood parks, resort open space, golf course, wine center open space, major street landscaping, fire station landscaping, vineyards and landscape buffers, and storm drain treatment ponds.</li> <li>(b) In accordance with the <i>Draft General Plan</i>, Community Service Element Policy CS-9.3, the applicant shall obtain an "approval letter" from the City of Napa Department of Public Works prior to obtaining a building permit, final subdivision map, or similar ministerial entitlements, stating that the project would not adversely affect the City's ability to adequately serve the public health and safety needs of all of its water customers during drought conditions and that there will be sufficient water to serve the basic health, hygiene and fire suppression needs of the community. The City shall issue the letter(s) of approval only for those portions of the proposed project for which the City can guarantee water supply specifically during drought conditions.</li> </ul>	LTS

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Table II-1 *continued*

Impact	Level of Significance Prior to Mitigation	Mitigation Measure	Level of Significance After Mitigation
UTIL-1 <i>continued</i>		<p>(c) The Implementation Program for the <i>Draft SRSP</i> shall be amended to include the requirements for obtaining an approval letter for water supply from the City of Napa Department of Public Works.</p> <p>(d) Water Policy 1.8 of the <i>Draft SRSP</i> shall be revised, prior to adoption, to require the <u>implementation</u> of water conservation measures (versus <u>support</u> of water conservation measures). The projected average daily potable water demand, as shown in existing Table 9 of the <i>Draft SRSP</i>, shall be revised to reflect the implementation of water conservation measures. In addition, the Implementation Program of the <i>Draft SRSP</i> shall be revised to include a Water Conservation Program which shall discuss methods for implementing water conservation measures to comply with Policy 1.8 of the <i>Draft SRSP</i>. Water conservation measures shall include the use of water saving devices (e.g., toilets, shower heads, and appliances) in all new construction; at a minimum, all faucets in sinks and lavatories shall be equipped with faucet aerators designed to limit the maximum flow to 2.2 gallons per minute (gpm); all shower heads shall be designed to limit the maximum flow to 2.5 gpm.</p> <p>Water conservation measures shall also include installation of drought tolerant landscaping in accordance with the California Water Conservation and Landscaping Act. The applicant shall submit to and receive approval from the Planning Department of a Landscape and Irrigation Plan designed and signed by a licensed landscape architect or landscape contractor prior to the issuance of a building permit for the nonresidential lots, or approval of a final or parcel map. The Plan shall conform to the City of Napa's Water Efficient Landscape Guidelines.</p>	

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Table II-1 *continued*

Impact	Level of Significance Prior to Mitigation	Mitigation Measure	Level of Significance After Mitigation
UTIL-1 <i>continued</i>		<p>(e) Policy 1.8 of the <i>Draft SRSP</i> shall also be revised prior to adoption to require the retrofit of existing homes within the City of Napa, as proposed by the applicant. The projected average daily potable water demand, as shown in existing Table 9 of the <i>Draft SRSP</i>, shall be revised to reflect the projected water savings from implementation of the revised Policy 1.8 of the <i>Draft SRSP</i>.</p> <p>(f) The Implementation Program shall also be revised prior to adoption of the <i>Final SRSP</i> to describe how the project would implement and comply with the above-mentioned policy. The Program shall include requirements to: 1) perform at least the minimum number of retrofits specified by the City Water Department, pursuant to the City's Retrofit Program for New Development; 2) perform additional voluntary retrofits necessary to prevent an increase to the City's average daily potable water demand (ADPWD); and 3) monitor the implementation of retrofits prior to occupancy of new buildings to ensure that the potable water demand from the City of Napa water system (e.g., demand beyond existing water use on the property) would be <u>completely</u> offset through implementation of (d) and (e) above.</p> <p>(g) In addition to the above water mitigation measures, the following standard City mitigation measures shall apply:</p> <ol style="list-style-type: none"> <li>1. The applicant shall: <ul style="list-style-type: none"> <li>• Install or execute the City's Installation Agreement, including appropriate security, for the landscaping and irrigation.</li> </ul> </li> </ol>	

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Table II-1 *continued*

Impact	Level of Significance Prior to Mitigation	Mitigation Measure	Level of Significance After Mitigation
UTIL-1 <i>continued</i>		<ul style="list-style-type: none"> <li>• Prior to initial occupancy and the release of installation security, the licensed professional who signed the final landscape and irrigation plans shall certify in writing that he or she has inspected and approved the installation of the landscaping and irrigation and found them to be consistent with the approved plan and that the systems are in working order.</li> <li>• Prior to occupancy, the applicant shall execute and record the City's Landscape Maintenance Agreement.</li> </ul> <ol style="list-style-type: none"> <li>2. The project shall connect to the City of Napa water system. Any existing well must be properly protected from potential contamination. If an existing well is to be destroyed, a well destruction permit must be obtained from the Napa County Department of Environmental Management by a licensed well driller. If an existing well is not destroyed, it must be properly protected and an approved backflow prevention device installed according to the Water Division's specifications.</li> <li>3. Prior to trenching within existing roadway areas, the Developer's engineer shall ascertain the location of all underground utility systems and shall design any proposed subsurface utility extensions to avoid disrupting the services of such systems.</li> </ol>	

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Table II-1 *continued*

Impact	Level of Significance Prior to Mitigation	Mitigation Measure	Level of Significance After Mitigation
UTIL-2: The proposed project would exacerbate the existing overloaded conditions experienced at the Napa Sanitation District (NSD) wastewater treatment plant during wet weather periods.	S	<p>UTIL-2: The following six-part mitigation measure (a through f) shall be implemented:</p> <p>(a) The discussion under Napa County LAFCO in the <i>Draft SRSP</i> shall be rewritten, prior to adoption of the <i>Final SRSP</i>, to indicate: 1) the project is not within the sphere of influence of the NSD; and 2) the responsibilities of the applicant in coordinating with the NSD in requesting a sphere-of-influence amendment and annexation from LAFCO.</p> <p>The applicant shall assist NSD in formally requesting from LAFCO a sphere-of-influence amendment to include the project site and an annexation of the project site into NSD. The request shall be approved prior to the approval of a Tentative Map for the entire site or other similar approval per the development agreement for the project.</p> <p>If the request for annexation to NSD were not approved at that time, the applicant would be required to implement an approved alternative method for providing wastewater treatment and disposal, such as building an on-site wastewater treatment facility. Both alternatives shall be covered in the <i>Draft SRSP</i> equally prior to adoption.</p> <p>(b) A "will-serve" letter from the NSD shall be obtained for the entire project prior to the receipt of the tentative map approval or similar entitlement identified in the Development Agreement if the NSD is operating under critical capacity and/or if it is warranted by the City. Such a letter may only be provided if the proposed expansion of the NSD facilities is scheduled to be completed before wastewater is generated by the proposed project. In the event that a "will-serve" letter is not issued, the proposed</p>	LTS

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Table II-1 *continued*

Impact	Level of Significance Prior to Mitigation	Mitigation Measure	Level of Significance After Mitigation
UTIL-2 <i>continued</i>		<p>alternative for wastewater service shall be implemented; this alternative is further discussed in Chapter V.D of this EIR. The Implementation Program for the <i>Draft SRSP</i> shall be amended to include the requirement for obtaining a "will-serve" letter from NSD.</p> <p>(c) A discussion shall be included in the <i>Draft SRSP</i> requiring that the applicant receive sanitary sewer infrastructure design approval from the NSD before connecting to the NSD trunk main. This discussion shall be included in the Implementation Program, Financing and Construction of Project Infrastructure section of the <i>Draft SRSP</i>.</p> <p>(d) The discussion about sanitary sewers in the <i>Draft SRSP</i> shall be corrected to acknowledge that the NSD facility currently does not have the capacity to accept additional wastewater generated from new development.</p> <p>(e) Revised Policy 1.8 addressed in Mitigation Measure UTIL-1(d) and (e), shall also state that the project shall retrofit existing homes with water-saving devices to assure there is no net increase in wastewater loading to the NSD facility. The estimated average daily sewer flows, as shown in existing Table 8 of the <i>Draft SRSP</i>, shall be revised to reflect the projected wastewater flow reduction from implementation of Mitigation Measure UTIL-1(d) and (e).  The Implementation Program shall also be revised prior to adoption of the <i>Final SRSP</i> to describe how the project would demonstrate the effectiveness of the on-site water saving devices and off-site retrofits (e.g., monitoring the implementation retrofits in relationship with new on-site fixtures installed) to ensure that the project's estimated wastewater generation flow would be <u>completely</u> offset with the implementation of required and voluntary water saving measures described in Mitigation Measure UTIL-1 (d) and (e).</p>	

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Table II-1 *continued*

Impact	Level of Significance Prior to Mitigation	Mitigation Measure	Level of Significance After Mitigation
UTIL-2 <i>continued</i>		(f) In addition to the above measures, the following standard City mitigation measure shall apply:  1. Any needed existing septic systems, setbacks and reserve areas must be protected and maintained during cleaning, grading, construction. After connection to a wastewater treatment system, any existing septic tanks shall be properly destroyed.	
UTIL-3: Reclaimed water application may adversely impact public health and environment if inadequately treated or inappropriately applied.	S	UTIL-3: Compliance with existing regulatory requirements for treatment and application of reclaimed water would reduce this potential impact to less than significant. However, the Implementation Program of the <i>Draft SRSP</i> shall describe how the regulatory requirements would be satisfied prior to adoption of the <i>Final SRSP</i> .	LTS
UTIL-4: Project development may interfere with PG&E's requirements for operation and maintenance of gas and electric facilities.	S	UTIL-4: The project applicant shall work with PG&E to develop the site in a manner which allows for safe and efficient operation and future maintenance of gas and electric facilities. Compliance with PG&E's recommendations shall be verified prior to approval of tentative subdivision maps.	LTS
<b>L. Noise</b>			
NOI-1: Portions of the site proposed for employee housing and Neighborhood 1 would be exposed to noise levels that would be considered conditionally acceptable. The remainder of the site would be considered completely compatible. Noise levels in the conditionally acceptable area would require mitigation.	S	NOI-1a: Homes within Neighborhood 1 shall be sited to include useable yard space on the south side of buildings to shield this space from highway noise. Alternatively, the feasibility of using fencing to shield outdoor areas shall be evaluated based on topography. Noise levels in the outdoor use areas associated with the employee housing shall be mitigated by orienting the homes such that the buildings themselves shield the outdoor use area. If the employee housing area, as shown in Figure III-13, is rotated so that the parking lot is parallel to SR 29/12 and the patios face the parking lot, noise levels in most of the yards would be reduced to 60 dB or less. In some of the yards, noise levels may exceed 60 dB and be as high as 63 dB, but these noise levels would be consistent with the intent of the both the current and Draft Noise Elements of the City's <i>General Plan</i> .	LTS

S: Significant; LTS: Less Than Significant; PS: Potentially Significant; SU: Significant Unavoidable

Table II-1 *continued*

Impact	Level of Significance Prior to Mitigation	Mitigation Measure	Level of Significance After Mitigation
NOI-1 <i>continued</i>		<u>NOI-1b</u> : Homes within the 60-63 dB L <sub>dn</sub> contour shall be required to provide mechanical ventilation to assure that interior noise standards are met.	
NOI-2: Noise generated by agricultural operations would occasionally generate significant noise levels in the new residential area.	S	<u>NOI-2</u> : Bedroom windows in homes within 1,300 feet of a wind machine shall have an STC (Sound Transmission Class) rating approximately 10 decibels higher than standard windows (i.e., an STC rating of 40). Installation of such windows would provide for acceptable noise levels indoors with the windows closed, even during wind machine use not in excess of sleep disturbance levels.	LTS
<u>NOI-3</u> : During construction, noise levels would be temporarily elevated on the property surrounding the site. There are scattered farm houses in this area that would experience these increased noise levels. Generally, construction would take place far from these areas and, while noticeable, would not be significant. For short periods of time when construction is taking place within several hundred feet of these homes and near occupied new homes on the project site, noise levels may be significant.	S	<p><u>NOI-3</u>: The following combination of measures shall be required for project construction:</p> <ul style="list-style-type: none"> <li>• Construction activities shall be limited pursuant to Napa Municipal Code (NMC) 8.08.025 to 7 AM to 7 PM, Monday through Friday and 8 AM to 4 PM on weekends or legal holidays, unless a permit is first secured from the City Manager (or his/her designee) for additional hours. The ordinance further states that there will be: no start up of machines nor equipment prior to 8 AM, Monday through Friday; no delivery of materials nor equipment prior to 7:30 AM nor past 5 PM Monday through Friday; no cleaning of machines nor equipment past 6 PM, Monday through Friday; no servicing of equipment past 6:45 PM Monday through Friday.</li> <li>• All internal combustion engines for construction equipment used on the site shall have state-of-the-art muffler systems required by current law and be properly maintained.</li> <li>• Unnecessary idling of internal combustion engines shall be strictly prohibited. Grading and construction equipment shall be shut down when not in use.</li> <li>• All stationary noise-generating construction equipment, such as air compressors and portable power generators, shall be located as far as practical from existing residences and businesses and provided with acoustical shielding if necessary.</li> </ul>	LTS

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Table II-1 *continued*

Impact	Level of Significance Prior to Mitigation	Mitigation Measure	Level of Significance After Mitigation
NOI-3 <i>continued</i>		<ul style="list-style-type: none"> <li>Residential neighbors adjacent to the project shall be notified of the construction schedule in writing.</li> <li>A noise disturbance coordinator, responsible for responding to complaints about construction noise, shall be designated by the project contractor. The telephone number for the disturbance coordinator shall be posted at the construction site and shall also be included in the notice sent to neighbors regarding the construction schedule.</li> </ul>	
NOI-4: Project-generated traffic on Stanly Lane would significantly increase noise levels for the one existing residence adjacent to Stanly Lane near the bend in Stanly Lane.	S	NOI-4: During the final design phase of the road and Bay Trail, the applicant shall incorporate five-foot high solid fencing or berming to help shield yards, patios or other primary outdoor use areas associated with the existing home.	LTS
<b>M. Air Quality</b>			
AIR-1: Construction activities such as excavation and grading operations, construction vehicle traffic and wind blowing over exposed earth would generate exhaust emissions and fugitive particulate matter emissions that would affect local air quality.	S	<p>AIR-1: The BAAQMD has prepared a list of feasible construction dust control measures that can reduce construction impacts to levels that are less than significant. The following construction practices shall be required during all phases of construction within the project site:</p> <ul style="list-style-type: none"> <li>Water all active construction areas at least twice daily.</li> <li>Water or cover stockpiles of debris, soil, sand or other materials that can be blown by the wind.</li> <li>Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard.</li> <li>Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas and staging areas at construction sites.</li> <li>Sweep daily (preferably with water sweepers) all paved access roads, parking areas and staging areas at construction sites.</li> <li>Sweep streets daily (preferably with water sweepers) if visible soil material is carried onto adjacent public streets.</li> <li>Hydroseed or apply non-toxic soil stabilizers to inactive construction areas.</li> </ul>	LTS

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Table II-1 *continued*

Impact	Level of Significance Prior to Mitigation	Mitigation Measure	Level of Significance After Mitigation
AIR-1 <i>continued</i>		<ul style="list-style-type: none"> <li>• Enclose, cover, water twice daily or apply non-toxic soil binders to exposed stockpiles (dirt, sand, etc.).</li> <li>• Limit traffic speeds on unpaved roads to 15 mph.</li> <li>• Install sandbags or other erosion control measures to prevent silt runoff to public roadways.</li> <li>• Replant vegetation in disturbed areas as quickly as possible.</li> <li>• Shut down grading and construction equipment when not in use.</li> </ul>	
AIR-2: New traffic generated by the project and on-site vehicle use would increase regional emissions.	S	<p>AIR-2: The applicant shall be required to implement the Stanly Ranch TDM Plan covering the above measures and any additional measures proposed by the applicant in April 1998. The project would contain some non-automotive emission sources. Although these sources represent only a small fraction of total project emissions, effective control measures to reduce emissions from these sources are available. The following shall be required:</p> <ul style="list-style-type: none"> <li>• Use of low emission maintenance equipment and vehicles where feasible.</li> <li>• Use of natural gas-fired fireplaces rather than wood-burning fireplaces.</li> </ul> <p>Even with the implementation of all mitigation measures, project emissions would exceed the BAAQMD thresholds of significance. Project impacts on regional air quality are considered significant and unavoidable.</p>	SU

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Table II-1 *continued*

Impact	Level of Significance Prior to Mitigation	Mitigation Measure	Level of Significance After Mitigation
<b>N. Public Health and Safety</b>			
<u>PHS-1:</u> Asbestos-containing materials (ACM) and lead-based paint, if present in existing farm structures, could cause adverse health impacts to workers during demolition activities.	S	<u>PHS-1:</u> Prior to demolition activities, an asbestos survey and a lead-based paint survey or screening of all on-site structures proposed for demolition shall be completed to determine if these materials are present, which may require abatement or which would potentially pose a health risk to construction workers during site demolition activities. The asbestos survey shall be completed in accordance with BAAQMD regulations, and shall include the collection and analysis of suspect ACM. If ACM were found to be present, specifications shall be prepared for safe removal and disposal (abatement) of ACM by trained workers, in accordance with applicable federal, state, and local BAAQMD requirements. The lead-based paint survey or screening shall be completed by a qualified environmental professional (e.g., industrial hygienist). If lead-based paint were found to be present, demolition shall be conducted in compliance with the California Construction Lead Standard (Title 8, CCR, Section 1532.1) by trained workers.	LTS
<u>PHS-2:</u> Hazardous materials may currently be stored in existing farm structures, and could potentially cause health effects in workers during demolition activities.	S	<u>PHS-2:</u> An inventory of the interior areas of all on-site structures shall be completed prior to their demolition. If hazardous materials are identified as being stored in these areas at that time, those materials shall be transported to and disposed of/recycled at an appropriate off-site facility in accordance with applicable regulations. All PCB-containing materials (e.g., fluorescent light ballasts) shall be manifested and disposed of by a licensed hazardous waste contractor in accordance with federal and state regulations (40 CFR Part 761; Title 22, CCR, Section 66262; DTSC, 1994). Up to 25 mercury-containing fluorescent light tubes may be disposed of as non-hazardous waste, provided that the waste is not federally regulated and the tubes are disposed of at one time in a day (DTSC, 1994). If more than 25 mercury-containing tubes are disposed at one time in a day, the tubes shall be managed and disposed of as a hazardous waste or recycled (Title 22, CCR, Section 66262). An environmental professional shall be present to monitor demolition activities during removal of the floor/foundations to	LTS

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Table II-1 *continued*

Impact	Level of Significance Prior to Mitigation	Mitigation Measure	Level of Significance After Mitigation
PHS-2 <i>continued</i>		determine if hazardous materials releases, related to historic operations at the site, have affected soils beneath the floors/ foundations. If contaminated soil were encountered or suspected (e.g., soil discoloration or odor), a soil sampling plan shall be prepared and implemented prior to disturbance of soils. If sampling is required, the soil samples shall be collected by a qualified environmental professional, and the analytical results evaluated for determination of soil management options and an appropriate health and safety plan for construction workers developed. Regulatory agency notification, if applicable, shall be completed.	
<u>PHS-3</u> : Construction workers and the public may potentially be exposed to pesticides, herbicides, and other hazardous materials during construction activities.	S	<u>PHS-3</u> : To assess whether past land uses have resulted in pesticides and/or herbicides and other hazardous materials being present in shallow soils, soil samples shall be collected from areas of the project proposed for development. A soil sampling plan shall be developed by a licensed professional, in accordance with U.S. EPA SW-846 methodology (U.S. EPA, 1986), prior to initiation of grading on the site. A random sampling plan shall be developed for the entire region proposed for residential and commercial development. The samples shall be analyzed for organochlorine pesticides (U.S. EPA Method 8080), arsenic (U.S. EPA Method 6010), and chlorinated herbicides (U.S. EPA Method 8150) by a State-certified laboratory; a minimum of four samples shall be collected. The sample results would provide information on the need for additional investigations at the site. The results shall be evaluated by a qualified environmental professional (e.g., Certified Industrial Hygienist) to determine whether measured chemicals could pose a hazard to future site users, construction workers, or the environment. If chemicals at the site could pose a hazard, a qualified professional shall conduct a risk assessment to quantify hazards based on the sampling results, and develop appropriate remediation measures, as necessary, to reduce potential risks to future site users and/or the environment, to acceptable levels.	LTS

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Table II-1 *continued*

Impact	Level of Significance Prior to Mitigation	Mitigation Measure	Level of Significance After Mitigation
<u>PHS-4:</u> Construction operations during site development could result in hazardous materials releases at the site.	S	<u>PHS-4:</u> The contractor(s) performing grading and earthwork activities shall prepare a spill prevention plan for hazardous materials to be used at the site during development activities. The plan shall be prepared prior to the start of earthwork activities, and be submitted to the City for review. The plan shall designate an on-site employee responsible for plan implementation, and include the following: 1) types and quantities of hazardous materials; 2) anticipated equipment needs and maintenance; 3) temporary hazardous materials storage areas; 4) emergency response procedures for hazardous materials releases; and 5) procedures for contacting designated regulatory agencies in the event of a hazardous materials release.	LTS
<u>PHS-5:</u> Project operations could result in increased use, handling, and storage of pesticides, herbicides, and other hazardous materials at the golf course, vineyard, winery and resort. Uses at the site could potentially expose pesticide applicators, agricultural workers, golfers, residents and visitors to hazardous materials.	S	<u>PHS-5:</u> Compliance with the following would reduce this impact to a less-than-significant impact: 1) the appropriate federal and state regulations for employee training; 2) pesticide applicator training; 3) hazardous materials storage, labeling, hazardous materials inventories and permits; 4) pesticide use restrictions; and 5) pesticide application.	LTS

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**Table II-2**  
**SUMMARY OF LESS-THAN-SIGNIFICANT IMPACTS**  
**AND RECOMMENDED CONDITIONS OF APPROVAL**

Impact	Level of Significance Prior to Mitigation	Recommended Conditions of Approval	Level of Significance With Mitigation
<b>A. Land Use</b>			
<p><b>LU-A:</b> Both the Bay Trail and proposed River Trail have the potential to result in limited land use conflicts such as littering, noise, trespass or other nuisances.</p>	LTS	<p><b>LU-A:</b> The applicant shall work with the City Community Resources and Police Departments at the final trail design stage to develop trail designs and management regulations for Stanly Ranch that seek to minimize potential land use conflicts. It is expected that such measures would include:</p> <ul style="list-style-type: none"> <li>• Provision of screening between Neighborhood 4 homes and the future River Trail Southerly Loop.</li> <li>• Compliance with golf course industry standards for pedestrian safety through necessary means, including fencing or other barriers and/or design changes where trails are in proximity to the golf course and where trail users could be injured by golf balls. To minimize the height of fencing, trails may be designed at a lower elevation than surrounding terrain (i.e., depressed within the terrain) or curved fencing could partially cover the trail alignment.</li> <li>• Provision of barriers to prevent unauthorized motor vehicle use.</li> <li>• Provision of signs describing rules of operation (i.e., time of use, trail etiquette) at the public access parking area and other appropriate locations.</li> <li>• The project shall include provision of adequate maintenance and police and/or private security resources.</li> </ul>	LTS

LTS: Less Than Significant



Table II-2 *continued*

Impact	Level of Significance Prior to Mitigation	Recommended Conditions of Approval	Level of Significance With Mitigation
<b>B. Public Policy</b>			
<b>POL-A:</b> Implementation of the <i>Draft SRSP</i> would result in development proposed to be served by the Napa Sanitation District (NSD) that is outside of the adopted NSD Sphere of Influence (SOI). Based on the identified criteria of significance and LAFCO policies, the public policy impact would be less-than-significant.	LTS	<p><b>POL-A:</b> Implementation of the following Conditions of Approval shall be required:</p> <ul style="list-style-type: none"> <li>The applicant shall assist NSD in formally requesting a NSD Sphere-of-Influence amendment and annexation from LAFCO to annex the project site into NSD. The request shall be approved prior to the approval of a tentative map for the entire site or other similar approval per the Development Agreement for the project.</li> <li>If the request for annexation to NSD were not approved at that time, the applicant shall be required to implement an approved alternative method for providing wastewater treatment and disposal, such as an on-site wastewater treatment facility. If alternative methods of wastewater disposal are required, these shall be approved prior to approval of the tentative map for the entire site or other similar approval per the Development Agreement. Both alternatives shall be covered equally in the <i>Draft SRSP</i> prior to adoption.</li> <li>Mitigation measures recommended in the Public Utilities and Public Services sections of the EIR (IV.J and IV.K) shall be implemented.</li> <li>The discussion found in the <i>Draft SRSP</i> regarding Napa County LAFCO shall be rewritten prior to Specific Plan adoption to indicate: 1) the fact that the project is not currently within the SOI of the NSD; and 2) the responsibilities of the applicant in coordinating with NSD in requesting a SOI amendment and annexation request from LAFCO.</li> </ul>	LTS
<b>POL-B:</b> The <i>Draft SRSP</i> does not include adequate policies and development requirements to be compatible with the Airport Land Use Compatibility Plan regarding notification and other issues.	LTS	<p><b>POL-B:</b> The following safety and noise policies already contained in the <i>Draft SRSP</i> shall be implemented to reduce potential airport land use compatibility conflicts:</p> <ul style="list-style-type: none"> <li>Policy 4.1: Avoid developing within <i>Airport Land Use Compatibility Plan</i> Zone D (with the exception of the Environmental Interpretive Center).</li> </ul>	LTS

LTS: Less Than Significant

Table II-2 *continued*

Impact	Level of Significance Prior to Mitigation	Recommended Conditions of Approval	Level of Significance With Mitigation
POL-B <i>continued</i>		<ul style="list-style-type: none"> <li>Policy 4.2: Locate residential development in <i>Airport Land Use Compatibility Plan</i> Zone E.</li> <li>Policy 4.3: Locate the resort, winery and wine center in Zone F.</li> <li>Policy 5.3: Inform buyers of the proximity of the Stanly Ranch to the Napa County Airport and the potential for aircraft noise.</li> </ul> <p>The following additional Conditions of Approval shall be implemented to further reduce the potential for airport land use conflicts:</p> <ul style="list-style-type: none"> <li>As a condition of development, notification shall be provided to buyers in all compatibility zones through one of the following methods: dedication of overflight easements or deed noticing along with real estate disclosure statements. Regardless of the chosen method, the notification shall: 1) note that the property is subject to routine overflight by aircraft at low altitudes; and 2) provide positive assurance that a prospective buyer has received this information.</li> <li>Although no proposed uses or design features which may produce hazards to aircraft flight are proposed or anticipated, the <i>Draft SRSP</i> shall contain policies to avoid the following use or design over time : 1) glare or distracting lights which could be mistaken for airport lights; 2) sources of dust, steam or smoke; 3) sources of electrical interference with aircraft communications or navigation; and 4) any use which may attract large flocks of birds.</li> <li>Zoning height limits shall be 35 feet or less. This is a modification to the draft development standards contained in Appendix B of the <i>Draft SRSP</i>.</li> </ul>	

LTS: Less Than Significant

Table II-2 *continued*

Impact	Level of Significance Prior to Mitigation	Recommended Conditions of Approval	Level of Significance With Mitigation
<b>C. Transportation and Circulation</b>			
<u>TRANS-A</u> : The project is expected to produce a small demand for transit services of various types.	LTS	<u>TRANS-A</u> : Prior to its adoption, the <i>Draft SRSP</i> TDM program shall be revised to be more specific regarding employee transit shuttles and implementation. Within one year of employee housing and resort construction, the shuttle shall be operational with annual monitoring by the resort operator and monitoring reports to the Public Works Director.	LTS
<u>TRANS-B</u> : The project is expected to generate demand for pedestrian and bicycle facilities.	LTS	<u>TRANS-B</u> : The <i>Draft SRSP</i> shall assure that a direct bicycle connection between a planned future southern crossing bicycle path through Stanly Ranch is retained by providing an easement area or areas for a direct bicycle path connection near the southern crossing.	LTS
<u>TRANS-C</u> : The project is expected to increase demand for parking.	LTS	<u>TRANS-C</u> : The employee/public access parking lot shall provide a minimum 233 parking spaces, of which 20 shall be reserved and marked for public use, and shall reserve an adjacent upland area next to the highway (approximately 0.4 acres) for potential parking lot expansion. The resort operator shall monitor parking lot use for five years following resort completion and provide annual reports to the Public Works Department. If parking demand exceeds expectations, the applicant shall construct additional parking.	LTS
<b>D. Geology, Soils, and Seismicity</b>			
<u>GEO-A</u> : The proposed project would include construction of numerous improvements throughout the Highlands areas of the western portion of the project site. Construction of these improvements would require large-scale grading and modification of the existing topography which can result in significant erosion and the potential for slope destabilization.	LTS	<u>GEO-A</u> : The following standard City Conditions of Approval would apply: <ul style="list-style-type: none"> <li>All project-related grading, trenching, backfilling and compaction operations shall be conducted in accordance with the City of Napa Public Works Department Standard Specifications.</li> </ul>	LTS

LTS: Less Than Significant



Table II-2 *continued*

Impact	Level of Significance Prior to Mitigation	Recommended Conditions of Approval	Level of Significance With Mitigation
GEO-A <i>continued</i>		<ul style="list-style-type: none"> <li>For all subdivisions and parcel maps, the applicant shall prepare a Soils Investigation/Geotechnical Report in accordance with Section 16.36.200 of the Napa Municipal Code. It shall be submitted to the Public Works Director for review and determination of adequacy before approval of the parcel or final map. The improvement plans shall incorporate all design and construction criteria specified in the report. The geotechnical engineer shall sign the improvement plans and approve them as conforming to their recommendations prior to final map approval. The geotechnical engineer shall also assume responsibility for inspection of the work and shall certify to the City, prior to acceptance of the work, that the work performed is adequate and complies with their recommendations. Additional soils information may be required by the Chief Building Inspector during the plan check of individual house plans in accordance with Title 15 of the Napa Municipal Code.</li> </ul>	
<u>GEO-B:</u> Implementation of the proposed project would result in construction of buildings near the mapped trace of the West Napa Fault.	LTS	<u>GEO-B:</u> A 200-foot setback shall be observed for all structures designed for human habitation from lineaments L-4 and L-5 identified in Figure IV.D-1 unless further fault hazard evaluation is performed which concludes such setback is unnecessary.	LTS
<b>E. Hydrology, Drainage, and Water Quality</b>			
<u>HYDRO-A:</u> Increased runoff resulting from creation of new impervious surfaces could leave the site, potentially exacerbating existing flooding problems upstream and downstream on the Napa River. Given the project's current design, this impact would be less than significant.	LTS	<u>HYDRO-A:</u> The following combination of measures shall be included as Conditions of Approval for the proposed project: <ul style="list-style-type: none"> <li>The proposed project shall not result in more than a 0.0003 feet increase in peak Napa River flood elevations at the site (corresponding to a 0.00002 foot increase at Edgerly Island) for the 10-, 50-, or 100-year storm event. If significant changes occur to the development plan relative to the conditions used in the hydraulic modeling, the applicant shall rerun the model using the final development plan conditions. The Public Works Department shall review the final development plans (and any model reruns) to ensure that quantitative peak flood increase limitations have not been exceeded.</li> </ul>	LTS

LTS: Less Than Significant

Table II-2 *continued*

Impact	Level of Significance Prior to Mitigation	Recommended Conditions of Approval	Level of Significance With Mitigation
HYDRO-A <i>continued</i>		<ul style="list-style-type: none"> <li>The Public Works Department shall review the final development plan to ensure that the project includes measures to minimize the amount of connected impervious surfaces. Wherever possible, the applicant shall direct roof runoff to infiltration trenches or vegetated areas prior to discharge to the storm drain system and non vehicle-related paved surface shall be constructed with a porous material. If site conditions render these mitigation measures infeasible in particular situations (e.g. unfavorable geotechnical conditions), the applicant shall submit a written explanation and request for waiver to the Public Works Department. The waiver must be approved by the Public Works Department prior to approval of the grading and drainage plan.</li> <li>The applicant shall submit a drainage plan designed in accordance with the City of Napa Standard Specification for the Public Works Department review and approval. In addition, since the project includes excavation and fill in the flood hazard zone of the Napa River, the applicant shall submit Certifications of Compliance (prepared by a civil engineer) to the Public Works Department at the times set forth in Chapter 17.62 of the Napa Municipal Code.</li> </ul>	
<b>F. Biological Resources</b>			
<i>Based on the criteria of significance, no impacts would be less-than-significant prior to mitigation.</i>			
<b>G. Historic and Cultural Resources</b>			
<b>HIS-A:</b> The <i>Draft SRSP</i> proposes to move the original ranch fruit drying building to a site near its current location to be reused as an Environmental Interpretative Center.	LTS	<b>HIS-A:</b> A Certificate of Appropriateness shall be obtained from the Cultural Heritage Commission for any future exterior rehabilitation of the fruit drying building.	LTS
<b>HIS-B:</b> The project would reuse the historic stone bridges as part of the Bay Trail. Assuming the bridges would not be removed or modified, this aspect of the project would not have a significant effect.	LTS	<b>HIS-B:</b> If any future reinforcement is needed, the four Stanly Lane bridges shall be reinforced and rehabilitated, rather than being dismantled and rebuilt as steel arch culverts. The rehabilitation of the bridges would be consistent with <i>The Secretary of Interior Standards for Rehabilitation and Guidelines for Rehabilitation of Historic Buildings</i> published by the U.S. Department of Interior (1992). This Condition of Approval would keep project impacts less-than-significant.	LTS

LTS: Less Than Significant

Table II-2 *continued*

Impact	Level of Significance Prior to Mitigation	Recommended Conditions of Approval	Level of Significance With Mitigation
<u>HIS-C</u> : The <i>Draft SRSP</i> would result in three ranch buildings adjacent to and contributing to the significance of the Stanly House being moved or demolished.	LTS	<p><u>HIS-C1</u>: It may not be feasible to move or reuse the other three historic Stanly Ranch buildings - the vehicle/tool shed, the carriage house, and foreman's house. Prior to demolishing or salvaging parts of these three buildings, the buildings shall be documented according to the Outline Format described in the Guidelines for the Historic American Building Survey (HABS) published by the Western Regional Office of the National Park Service. This documentation shall include archival quality, large format (minimum 4 by 5 inch) photographs of the exterior and interior of the building. Sketch floor plans of the buildings should also be included as part of the HABS documentation. A copy of the documentation, with original photo negatives and prints, should be donated to an historical archive accessible to the public, like the Napa County Historical Society, other suitable local history collection.</p> <p><u>HIS-C2</u>: The applicant shall preserve any features of historic interest in the three buildings, and incorporate these features into the design of new buildings proposed for the Stanly Ranch. If the building is to be demolished, the applicant shall contact representatives of the Napa County Historical Society, Napa County Landmarks and the Napa Cultural Heritage Commission, and other interested parties. The representatives of these groups shall have an opportunity to examine the buildings and provide suggestions for salvaging elements of the buildings.</p>	LTS
<b>H. Visual Quality</b>			
<u>VIS-A</u> : Implementation of the proposed project could adversely affect views from some public locations along Cuttings Wharf Road. However, this impact would be less than significant for the following reasons: proposed structures are low rise, these views would be at a distance of approximately one-half mile or more, and views of new development would be partially screened by intervening vineyards and required agricultural buffer plantings.	LTS	<u>VIS-A</u> : None necessary.	LTS

LTS: Less Than Significant



Table II-2 *continued*

Impact	Level of Significance Prior to Mitigation	Recommended Conditions of Approval	Level of Significance With Mitigation
<u>VIS-B</u> : Implementation of the proposed project could adversely affect views from some public locations from the Napa Sanitation District (NSD) treatment plant or along the Napa River.	LTS	<u>VIS-B</u> : None necessary.	LTS
<u>VIS-C</u> : Implementation of the proposed project would change views of the site from some proposed public locations along the proposed Bay Trail and River Trail alignments on the project site. Visual impacts along the Bay and River Trails would be less-than-significant.	LTS	<u>VIS-C</u> : Final design plans for the golf maintenance facility shall identify fencing and landscape screening from the proposed River Trail.	LTS
<u>VIS-D</u> : Unshaded lighting fixtures could create additional light and glare. Given proposals regarding lighting in the Design Guidelines of the <i>Draft SRSP</i> , this impact would be less than significant.	LTS	<u>VIS-D1</u> : Mitigation Measure VIS-4 shall be implemented to ensure that the proposed lighting plans are consistent with the Design Guidelines of the <i>Draft SRSP</i> .	LTS
		<u>VIS-D2</u> : All new lighting shall be shielded to avoid glare and directed onto the project site and accessways.	
		<u>VIS-D3</u> : Low-level lighting shall be utilized in any parking areas as opposed to elevated high-intensity light standards.	
<b>I. Population, Employment, and Housing</b>			
<u>POP-A</u> : Along with City subsidized housing programs, the project's employee housing proposal assists the City in meeting its "fair share" housing goals for low and lower-income workers. To assure that this occurs, the following Conditions of Approval are recommended.	LTS	<u>POP-A1</u> : Prior to issuance of the first grading permit or other early approval as determined in the Development Agreement, the applicant shall enter into an agreement with the City to supply 54 employee rental units affordable to very low and lower income households (<50 percent of median income). The agreement shall include rent levels and ensure their continuing affordability over time. The applicant and/or property owner shall provide the City with a yearly accounting of the total affordable units occupied, the total units vacant, and the number of requests made by on-site employees desiring on-site affordable units.	LTS
		<u>POP-A2</u> : The City shall ensure that the employee housing is built in the first phase and at the same time as the resort area, wine center and winery are built.	

LTS: Less Than Significant

Table II-2 *continued*

Impact	Level of Significance Prior to Mitigation	Recommended Conditions of Approval	Level of Significance With Mitigation
<b>J. Public Services</b>			
<u>SER-A</u> : The Napa Valley Unified School District would be unable to accommodate the increase in students generated by Stanly Ranch. This impact would be less than significant because overcrowding, per se, would not constitute a significant impact on the environment, and no schools are proposed as part of the project.	LTS	<u>SER-A</u> : Stanly Ranch shall comply with state law to accommodate increased demand on school facilities and services by paying the required fees.	LTS
<u>SER-B</u> : Solid waste generation would increase during final design and site planning, construction, and post-construction or build-out of the project.	LTS	<u>SER-B1</u> : The applicant shall prepare, implement and administer the Source Reduction and Recycling Plan (SRRP) during the construction phase of the project. As the project is builtout, this responsibility shall be transferred to the various homeowners associations in the residential sector, and to the individual operators of the resort, golf course, winery and wine center for the non-residential sector. The SRRP shall provide that it shall be reviewed and updated every two years, and that it meets the City's Source Reduction and Recycling Element, with approval by the Public Works Director.	LTS
		<u>SER-B2</u> : At the final design phase, recycling facilities shall be provided in all areas where solid waste generating activities may occur.	
		<u>SER-B3</u> : During the construction/demolition and renovation period of the project, the applicant shall use the franchised garbage hauler for the service area which the project is located to remove all wastes generated during project development, unless applicant transports project waste. If the applicant transports the project's waste, applicant must use the appropriate landfill for the service area in which the project is located.	
		<u>SER-B4</u> : The applicant shall provide for the source separation of wood waste for recycling. Developer shall use the franchised garbage hauler for the service area in which located for collection of such wood waste, unless the applicant transports such wood waste to a location where wood waste is recycled.	

LTS: Less Than Significant

Table II-2 *continued*

Impact	Level of Significance Prior to Mitigation	Recommended Conditions of Approval	Level of Significance With Mitigation
SER-5 <i>continued</i>		<u>SER-B5</u> : Recycling/solid waste enclosures shall be provided in accordance with Chapter 17.102 of the Napa Municipal Code (NMC) for all commercial, industrial and multi-family projects with common solid waste facilities.	
<b>K. Public Utilities</b>			
<u>UTIL-A</u> : Development of Stanly Ranch would increase demand on power and gas services and telecommunications services.	LTS	<u>UTIL-A</u> : To minimize energy use, project developers shall include proposed energy conservation measures in site design. These measures shall be verified at the time of tentative map approval and building permit issuance.	LTS
<b>L. Noise</b>			
<u>NOI-A</u> : Aircraft noise exposure on the site is less than an $L_{dn}$ of 55 dB. These noise levels would be compatible with residential activity.	LTS	<u>NOI-A</u> : None required.	LTS
<u>NOI-B</u> : Traffic generated by the project would add to the noise generated by State Route 29/12. The additional traffic would result in an insignificant increase in the noise levels along SR 29/12 and other roads serving the site with the exception of Stanly Lane (see Impact NOI-4).	LTS	<u>NOI-B</u> : None required.	LTS
<b>M. Air Quality</b>			
<i>Based on the criteria of significance, no impacts would be less-than-significant prior to mitigation.</i>			
<b>N. Public Health and Safety</b>			
<i>Based on the criteria of significance, no impacts would be less-than-significant prior to mitigation.</i>			

LTS: Less Than Significant



**Table II-3**  
**SUMMARY OF RELATIONSHIP OF ALTERNATIVES' IMPACTS**  
**TO PROJECT'S SIGNIFICANT IMPACTS, PRIOR TO MITIGATION<sup>a</sup>**

Impact	Level of Significance					
	Proposed Project	No Project Alternative	All Resort Alternative	Agricultural Alternative	On-Site WW System Alternative	Reduced Density Alternative
<b>A. Land Use</b>						
LU-1: Agricultural/urban conflicts	S <sup>b</sup>	LTS	S++	LTS	S	S++
LU-2: Airport compatibility impacts	S	LTS	S++	LTS	S	S++
<b>B. Public Policy</b>						
POL-1: Conflict with adopted City <i>General Plan</i> policies	S	S	S	S	S	S++
POL-2: Conflict with <i>Draft General Plan</i> policies	S	S	S	S	S	S++
POL-3: Conflict with <i>Draft SRSP</i> policies	S	S	S	S	S	S
<b>C. Transportation and Circulation</b>						
TRANS-1: Emergency Access	S	LTS	S	LTS	S	S
TRANS-2: LOS at SR 12/121/Stanly Lane	S	S <sup>c</sup>	S++	S <sup>c</sup>	S	S++
TRANS-3: LOS at SR 12/121/29	S	LTS	S++	LTS	S	S++
TRANS-4: LOS at SR 29/Imola NB	S	S <sup>c</sup>	S++	S++	S	S++
TRANS-5: LOS at SR 12/121/Cuttings Wharf Road	S	LTS	S++	LTS	S	S++
TRANS-6: Construction traffic	S	LTS	S	LTS	S	S++
<b>D. Geology, Soils, and Seismicity</b>						
GEO-1: Seismic damage	S	LTS	S	S++	S--	S
GEO-2: Liquefaction impacts	S	LTS	S	LTS	S--	S
GEO-3: Corrosion of steel	S	LTS	S	S++	S--	S
<b>E. Hydrology, Drainage, and Water Quality</b>						
HYDRO-1: Fill in flood plain	S	LTS	S++	S++	S--	S++
HYDRO-2: Water quality degradation	S	S--	S--	S--	S	S++
HYDRO-3: Levee safety	S	LTS	S	S++	S	S
<b>F. Biological Resources</b>						
BIO-1: Direct impacts to wetlands	S	LTS	S	S--	S	S
BIO-2: Indirect impacts to wetlands	S	S--	S--	S	S	S
BIO-3: Tree removal impacts	S	LTS	S	S--	S	S++
BIO-4: Impacts to nesting raptors	S	LTS	S	S	S	S++

<sup>a</sup> Designation applies to level of significance prior to mitigation. It should be noted that in some cases, mitigation measures proposed or required for the proposed project may result in impacts after mitigation which are less than anticipated by an alternative (see examples in text). Less-than-significant impacts identified for the proposed project are not included in this table.

<sup>b</sup> LTS: Less than Significant; S: Significant; ++: Alternative's impacts are less than the project; --: Alternative's impacts are worse than the project.

<sup>c</sup> The existing level of service at SR 12/121/Stanly Lane and SR 29/Imola Avenue northbound off-ramp is F and therefore considered significant even without development at the site.

Table II-3 *continued*

Impact	Level of Significance					
	Proposed Project	No Project Alternative	All Resort Alternative	Agricultural Alternative	On-Site WW System Alternative	Reduced Density Alternative
BIO-5: Removal of oatgrass grassland	S	LTS	S	S	S	S
BIO-6: Mason's lilaeopsis impacts	S	S	S	S	S	S
BIO-7: Salt marsh common yellowthroat impacts	S	S	S	S	S	S
BIO-8: Listed fish species impacts	S	S	S	S	S	S
BIO-9: Unlisted fish species impacts	S	S	S	S	S	S
BIO-10: Salt marsh harvest mouse	S	LTS	S++	S	S	S++
BIO-11: Impacts to nesting special-status bird species	S	S++	S	S--	S	S++
BIO-12: Sensitive bat species impacts	S	LTS	S	S	S	S
BIO-13: Wildlife movement impacts	S	LTS	S	LTS	S	S
<b>G. Historic and Cultural Resources</b>						
HIS-1: Archaeological impacts	S	LTS	S	S--	S	S
HIS-2: Stanly House impacts	S	S	S	LTS	S	LTS
HIS-3: Tree impacts	S	S	S	S--	S	S--
HIS-4: Cistern impact	S	LTS	S	LTS	S	PS
<b>H. Visual Quality</b>						
VIS-1: Inconsistency with scale and character of rural surroundings	S	LTS	S++	LTS	S	S++
VIS-2: Conflict with visual-related policies of adopted and <i>Draft General Plans</i>	S	LTS	S	S	S	LTS
VIS-3: Impact on views from SR 29/12 and SR 12/121 (proposed scenic corridors)	S (short-term) LTS (long-term)	LTS	S++ (short-term) LTS (long-term)	S	S (short-term) LTS (long-term)	S++ (short-term) LTS (long-term)
VIS-4: Potential inadequate design review	S	LTS	S	S++	S	S
<b>I. Population, Employment, and Housing</b>						
No significant impacts for the project or alternatives.	—	—	—	—	—	—
<b>J. Public Services</b>						
SER-1: Demands for police services	S	LTS	S	S++	S	S
SER-2: Firefighting response times	S	LTS	S	S	S	S
SER-3: Increased recreational demand	S	LTS	LTS	LTS	S	S

<sup>a</sup> Designation applies to level of significance prior to mitigation. It should be noted that in some cases, mitigation measures proposed or required for the proposed project may result in impacts after mitigation which are less than anticipated by an alternative (see examples in text). Less-than-significant impacts identified for the proposed project are not included in this table.

<sup>b</sup> LTS: Less than Significant; S: Significant; ++: Alternative's impacts are less than the project; --: Alternative's impacts are worse than the project.

<sup>c</sup> The existing level of service at SR 12/121/Stanly Lane and SR 29/Imola Avenue northbound off-ramp is F and therefore considered significant even without development at the site.

Table II-3 *continued*

Impact	Level of Significance					
	Proposed Project	No Project Alternative	All Resort Alternative	Agricultural Alternative	On-Site WW System Alternative	Reduced Density Alternative
<b>K. Public Utilities</b>						
UTIL-1: Impact on water supply	S	LTS	S++	S	S	S++
UTIL-2: Impact on NSD plant	S	LTS	S++	LTS	LTS	S++
UTIL-3: Reclaimed water application	S	LTS	S	S	S	S
<b>L. Noise</b>						
NOI-1: Traffic noise impacts	S	LTS	LTS	LTS	S	S++
NOI-2: Agricultural operations impacts	S	LTS	S++	LTS	S	S++
NOI-3: Construction noise impacts	S	LTS	S++	LTS	S	S++
NOI-4: Stanly Lane traffic impacts	S	LTS	S++	LTS	S	S++
<b>M. Air Quality</b>						
AIR-1: Construction impacts	S	LTS	S	LTS	S	S
AIR-2: Regional emissions	S	LTS	S++	LTS	S	S++
<b>N. Public Health and Safety</b>						
PHS-1: Asbestos and lead paint	S	LTS	S	S	S	S
PHS-2: Hazardous materials/workers	S	LTS	S	S	S	S
PHS-3: Agricultural chemicals/workers	S	LTS	S	S--	S	S
PHS-4: Hazardous material releases	S	LTS	S	S--	S--	S
PHS-5: Increased hazardous material use	S	LTS	S--	S++	S--	S

- <sup>a</sup> Designation applies to level of significance prior to mitigation. It should be noted that in some cases, mitigation measures proposed or required for the proposed project may result in impacts after mitigation which are less than anticipated by an alternative (see examples in text). Less-than-significant impacts identified for the proposed project are not included in this table.
- <sup>b</sup> LTS: Less than Significant; S: Significant; ++: Alternative's impacts are less than the project; --: Alternative's impacts are worse than the project.
- <sup>c</sup> The existing level of service at SR 12/121/Stanly Lane and SR 29/Imola Avenue northbound off-ramp is F and therefore considered significant even without development at the site.



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## **Chapter III**

### **PROJECT DESCRIPTION**

■ ■ ■

#### **A. Regional and Project Location**

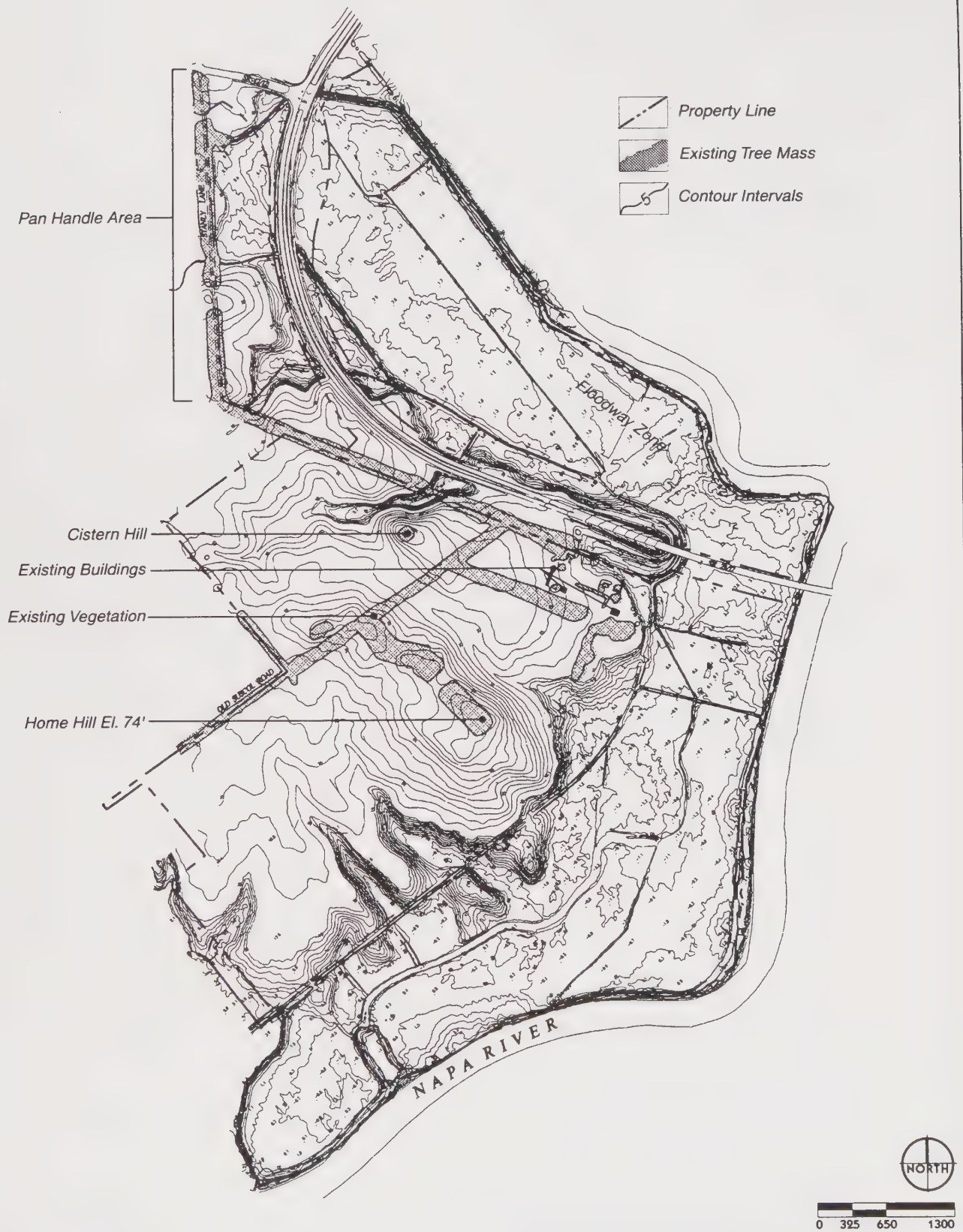
The Stanly Ranch site is located in the City of Napa, about 52 miles northeast of San Francisco and 61 miles southwest of Sacramento (see Figure I-1). The Napa city limits cover 16.7 square miles within southern Napa County, straddling the Napa River between the Howell Mountains on the east and Mayacamas Mountains on the west.

The City of Napa and the project site are accessible via several State highways. State Route (SR) 29/12 provides access from Cordelia and Interstate 80 to the east. SR 12/121, which abuts the northern edge of the site, runs west towards Sonoma, Petaluma, and Highway 101 and northeast to SR 128 and Lake Berryessa. SR 29 passes through the northern portion of the site and provides access from Vallejo to the south and Yountville to the north (see Figure I-1).

The Stanly Ranch site is located at the junction of SRs 12, 29, and 121, about three miles south of downtown Napa and less than one-mile northwest of the Napa County Airport. Stanly Lane, a public, two-lane road, provides access to the interior of the site from SR 12/121 and will connect with Old Suscol Road within the site (see Figure III-1).

The Napa River flows along the site's southern and eastern boundary. Low, flood prone lands separate the project site from most of the rest of the City of Napa to the north, east of SR 29/12. Other adjacent and nearby uses include the Napa Valley Corporate Park to the northeast; the Napa Sanitation District Wastewater Treatment Facility and Ponds, Napa County Airport and the County Airport Industrial Park to the southeast across the Napa River; and vineyards to the west and southwest. To the north, across SR 12/121 and west of SR 29/12 are a Caltrans Park and Ride lot, a "pumpkin farm" lot, and grazing land.

The site is entirely within City limits (since 1964) and the City's Rural/Urban Limit (RUL) line (since its creation in 1975). This line defines the limits of urban development under the City's General Plan, and, in effect, defines the planned future



SOURCE: EDAW 1997.

# STANLEY RANCH SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT

Figure III-1  
Existing Site Conditions

City limits, as discussed in the "Public Policy" section of Chapter IV of this EIR. The lands to the north of the site, north of Golden Gate Drive and northeast of the site east of SR 29/121, are not incorporated into the City, as shown in Figure I-1.

## **B. Site Characteristics**

### Defined Terms

*Lowlands* means the approximately 425-acre portion of the project site bounded on the exterior largely by the Napa River and on the interior by the inland boundary of wetlands subject to the jurisdiction of the U.S. Army Corps of Engineers (COE) under Section 404 of the Clean Water Act. The Lowlands mainly comprise wetlands subject to Corps jurisdiction, but they also include uplands not subject to the COE. The North and South Lowlands lie on the north and south sides of State Route 29/12.

*Highlands* means the approximately 493-acre portion of the project site not within the Lowlands. The Highlands mainly comprise upland areas not subject to COE jurisdiction, but they also include some small areas subject to COE jurisdiction.

The Stanly Ranch site encompasses about 918 acres of land, bounded by SR 12/121 on the north, the waterways of the Napa River and Horseshoe Bend on the south and east, and unincorporated Napa County lands to the west and northeast. SR 29/12 runs through the northern portion of the site (see Figure I-1). Most of the site is currently undeveloped and used for grazing and viticulture.

### **1. Natural Features**

The site is composed of two distinct areas. The Lowlands, about 425 acres, abut the Napa River, while the Highlands, an area of about 493 acres, form the interior portions of the site (see Figure III-2). Much of the Lowlands area was historically wetlands that were diked and reclaimed over the last century. Due to high soil compressibility, the area has subsided three to four feet over the years so that portions of the South Lowlands are currently below mean sea level. The Lowlands portion of the site lies within the 100-year floodplain of the Napa River as shown in Figures III-2 and 3.

The Highlands portion of the site (see Figure III-2) consists of plains and low rolling hills that support grasslands and about 100 acres of vineyards. The largest of the hills, Home Hill, rises to an elevation of 74 feet as shown in Figure III-1. From this

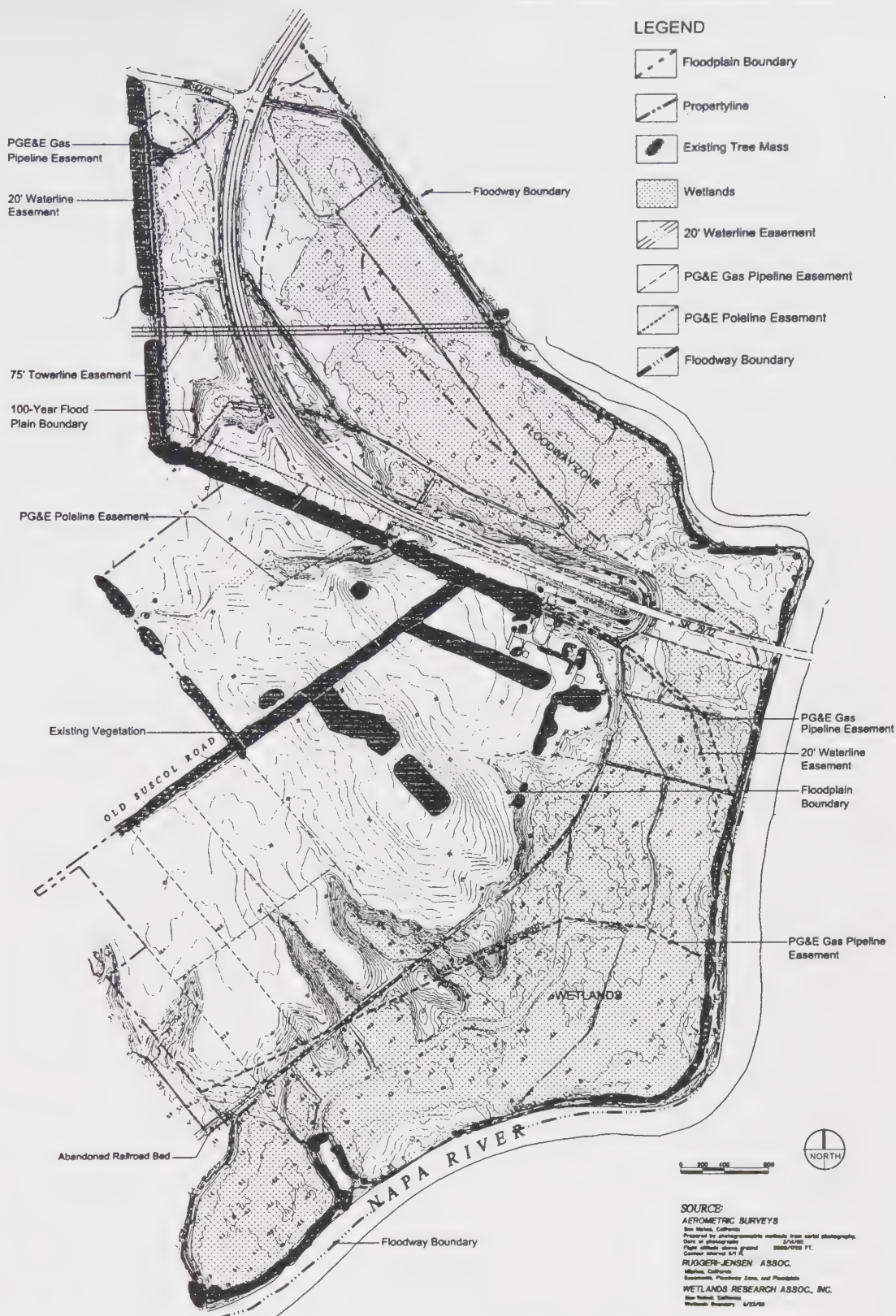




# STANLEY RANCH

SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT

Figure III-2  
Highlands and Lowlands



# STANLEY RANCH

## SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT

Figure III-3  
Site Features



location, one can look southwest towards Napa and Marin counties across the Napa River. Slopes in the Highland area are moderate to gentle with moderately steep slopes limited to the Home Hill and Cistern Hill areas. About 17 acres of the site include slopes greater than 15 percent. The Highlands also include an area known as the "panhandle" which is a roughly 500-foot wide area of land connecting the bulk of the Highlands to SR 12/121. The panhandle area is bounded on the west by Stanly Lane and on the east by SR 29/12 (see Figure III-1).

Large eucalyptus windrows were planted more than 120 years ago along Stanly Lane, Old Suscol Road, and in several other locations on the site as windbreaks to assist agricultural operations and as a fuel source. These rows of trees are one of the most visually noticeable features on the site, especially when viewed from SRs 29/12 and 12/121. Eucalyptus trees have also been planted along much of the site's Napa River edge. Stanly Lane and Old Suscol Road are both framed by the eucalyptus windrows (see Figure III-1).

Three seasonal streams traverse the panhandle area and drain an off-site watershed of about 3,700 acres. These streams cross the panhandle area between Stanly Lane and SR 29/12 (see Figure III-1).

## **2. Developed Features and Utilities**

Eight small farm-related buildings are located on the site at the southeast end of Stanly Lane (see Figure III-1). Some of these are occupied by a vineyard foreman and seasonal ranch employees, and some are used for equipment storage. One building is occupied by the Stanly Ranch office, and some buildings are vacant. These buildings and other historic structures are discussed in more detail in the "Historic and Cultural Resources" section of Chapter IV.

The applicant plans to offer many of the existing buildings to the Napa County Historical Society or Napa Landmarks, Inc. The building currently used to house the Stanly Ranch office is proposed for relocation to serve as an Environmental Interpretive Center. It is hoped that the on-site cistern can be incorporated into the proposed spa design. The historic bridges in Stanly Lane are proposed to remain as part of the Bay Trail.

Several utility easements cross the Stanly Ranch site, as shown in Figure III-3. A 75-foot wide Pacific Gas & Electric (PG&E) Company tower line easement crosses the panhandle portion of the site in a general east-west direction. A main 20-foot City water line easement is located along Stanly Lane throughout its length and south to and across the Napa River. Two 15- to 20-foot PG&E gas easements also cross the Napa River: one trends north along Stanly Lane while the other trends west



across the South Lowlands. A separate PG&E pole line easement also follows Stanly Lane.

On-site roads, as mentioned above, include Stanly Lane, Old Suscol Road, and informal, unpaved ranch roads such as one along the levee adjacent to the Napa River. Old Suscol Road connects to Cuttings Wharf Road at the southwest corner of the site, but is currently unpaved except for the westernmost reach which provides access to the ranch vineyard and an adjacent property.

An abandoned railroad bed crosses the southern portion of the site in a southwest/northeast direction, generally separating the South Lowlands from the Highlands (see Figure III-3).

### **C. Proposed Project**

#### Defined Terms

*Project or Proposed Project* is defined as the development of the project site that could result in direct and reasonably foreseeable indirect changes in the physical environment in accordance with the *Draft SRSP* and related local, state and federal approvals, permits and entitlements.

*Project Site:* The 918-acre Stanly Ranch property, as shown in Figure 1-1 and III-1, further identified as Assessor Parcel Numbers 47-230-05, 24, 43; 47-240-11, 12, 13, 14, 15; and 43-260-01.

#### **1. Specific Plan and General Plan Overview**

A Specific Plan is a planning and regulatory tool available to local governments in the State of California. Under California Law (Government Code Section 65450 et. seq.), cities and counties may use Specific Plans to implement the jurisdiction's adopted General Plan. A Specific Plan must include text and illustrations which show the location, distribution and amount of land use; public and private transportation; sewage, water, drainage, solid waste disposal, energy and other essential facilities in the area to support proposed land uses; standards and criteria by which development will proceed and standards for conservation of natural resources, where applicable; and implementing measures including regulations, public works projects, and financing measures to carry out the project. A Specific Plan must also include a statement of its relationship to the General Plan, and must be consistent with goals, policies and land uses of the General Plan.

The City's current General Plan, adopted in 1983, identifies Stanly Ranch as a "Study Area" which means the area requires further evaluation of land use alternatives, development constraints and service availability before a land use designation is made. The Specific Plan and environmental review provide a mechanism to accomplish that evaluation. A General Plan Amendment from "Study Area" to land use designations consistent with the Specific Plan would be a necessary part of any Specific Plan approval.

In 1991, the City Council authorized a "cooperative planning effort" between the City and applicant to prepare a Specific Plan for Stanly Ranch. City staff were to identify issues and technical requirements for the Plan, and to manage the project's environmental review. In 1992, the Stanly Ranch consultants presented three sketch plan alternatives to the Council in a study session; a council majority informally indicated they preferred a mixed residential/resort alternative. In 1997, the current Specific Plan proposal for a residential/resort project was submitted by the applicant.

## **2. Plan Objectives**

a. Applicant. The primary objective of the applicant is the development and operation at the Stanly Ranch of an exceptionally high-quality, destination resort containing 200 guest cottages and 100 resort homes which collectively meet or exceed the design and amenity standards of Carefree Resorts, one of the resort partners. By attracting new visitors to the Napa Valley, the resort at Stanly Ranch is proposed to complement and not compete directly with existing lodging facilities in the Napa Valley.

Integral to this primary objective is the creation of a sustainable environment for the resort which restricts development to the Highlands portion of the Stanly Ranch and leaves undeveloped the North and South Lowlands adjacent to the Napa River. The project objectives include provision of unique recreational and leisure opportunities for the resort visitors, including an 18-hole golf course and clubhouse, tennis courts and a spa, each designed to eliminate or reduce to insignificant levels its impacts on the Stanly Ranch and its environs. Guests of the resort can tour the nearby Carneros District, visit and shop in Historic Downtown Napa and travel to the other communities and wineries of the Valley.

To achieve this primary objective in a financially feasible manner, the project applicant states that development of the resort must be undertaken concurrently with the development of a residential community of 540 dwelling units, a winery and a wine center which will share the unique resort environment and its amenities in return for substantially contributing to the cost of the resort infrastructure. According to the applicant, the residential community is intended to expand the

diversity of lifestyles and living environments available within the City, and provide for on-site housing opportunities for the employees of the resort.

A public benefit of the project is the applicant's proposal to construct a segment of the Bay Trail through the site from Golden Gate Drive to Cuttings Wharf Road, and a River Trail. These trails have been designed to avoid the wildlife habitat of the Lowlands, not interfere with the operation of the golf course and respect the privacy of the residential community. According to the project applicant, the resort and the residential community together are to generate at buildout a substantial, annual net positive fiscal impact for the government of the City of Napa.

b. City. City objectives related to the *Draft Stanly Ranch Specific Plan (SRSP)* are identified from the existing City General Plan and sound city management objectives enumerated in the *Draft General Plan*.

A primary objective, given the site's "Study Area" designation, is to provide an appropriate land use for the site. The City has intended that the property is suitable for "urban development". This intention is evident from language in the 1983 *General Plan*, which states:

"The Stanly Ranch lies south of the City core, straddling the Southern Crossing on the north and south. It is included within the RUL as an appropriate site for urban development."

This objective is reinforced by the City's long standing Rural Urban Limit or RUL policies, which state that the RUL defines the limits of urban development under the General Plan; it is in effect the planned future city limits. A rural greenbelt is to be maintained beyond the RUL. Stanly Ranch has been within the City RUL since its inception in 1975.

Another City objective is, to the degree feasible, balancing of employment opportunities with the provision of housing and providing housing types to meet the needs of the workforce in Napa.

An objective contained in the current General Plan and emphasized in the *Draft General Plan* is encouragement of attractively designed tourist commercial uses in appropriate locations within the RUL.

A related objective, which has become increasingly important to local jurisdictions over the last 10-15 years and enumerated in the *Draft General Plan*, is city fiscal health, and achievement of a mix of uses with a net positive fiscal impact on the City.



A final objective is that projects be developed in an environmentally sound manner. In particular, City policies focus on protection of wetlands, riparian corridors, other scarce habitats, hillsides, and agricultural lands adjacent to but outside the RUL.

### 3. Plan Features

The *Draft SRSP* provides for the development of a recreation-oriented community, with resort and residential uses in the Highlands portion of the site (see Figure III-4). Development would be accommodated within the following three primary areas:

- A resort area focused around a lodge on about 66 acres in the west-central portion of the site framed by Stanly Lane and Old Suscol Road, plus the golf clubhouse across the street;
- A commercial area within the "panhandle" on about 12 acres that would include a wine center and winery; and
- A residential area on about 105 acres that would include five residential neighborhoods with private neighborhood parks (102 acres) and employee housing (3 acres).

Additional acreage would be devoted to parking, roads, and open space, including the golf course. Each of the above development areas is discussed in more detail below, and summarized in Table III-1. An Illustrative Master Plan is shown in Figure III-4.

a. Resort Area. The resort area, located in the west central part of the site, would include the following elements: a main lodge (with restaurants, conference facility, and retail uses); spa (with swimming pool and tennis courts); 200 guest cottages and 100 resort homes, 25 of which are anticipated to be managed as Carefree Club units (see description under "Resort Units" below); and a golf course clubhouse (with restaurant and golf shop). A maintenance facility is also part of the resort. For all uses within the resort area, 385 parking spaces would be provided at the resort/golf clubhouse complex. (Additional employee parking is located at the end of Stanly Lane. See e. Parking). A layout of uses for the resort area is shown in Figure III-5.

Resort facilities are to be for the use and convenience of guests and residents, and the applicant does not intend to solicit outside events.

(1) Main Lodge. The main lodge, to be sited near Old Suscol Road, would include a main restaurant and kitchen for about 220 patrons. An architectural concept for the main lodge is shown in Figure III-6. Breakfast and dinner would be served within this portion of the main lodge. In addition, a special wine cellar within





Source: EDAW, 1998

# STANLY RANCH SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT

Figure III-4  
Illustrative Master Plan

BRADY ■ LSA  
PLANNERS AND LANDSCAPE ARCHITECTS





**Table III-1**  
**STANLY RANCH PROJECT SUMMARY INFORMATION**

Area	Subarea	Acreage	% of Total	Square Footage	Units/ Spaces	Notes
<b>Resort<sup>a</sup></b>	Main Lodge -Restaurant -Retail -Conference Facility -Support			12,000 1,200 14,000 18,000		220 seats; includes kitchen  Ballroom and meeting rooms Office, maintenance, lobbies
	Spa			12,000		Treatment rooms, exercise rooms and related services; pool and tennis=adttl. sq. footage
	Guest Cottages				200	800 sq.ft. each
	Resort Homes				75	2,300 sq.ft. each
	Carefree Club				25	2,300 sq.ft.
	Golf Course Clubhouse -Restaurant -Golf Shop -Miscellaneous Support			4,600 1,200 5,200		170 seats
	Maintenance Building			4,500		
	<b>Subtotal for Resort Area</b>	<b>66.0</b>	<b>7.2</b>	<b>72,700</b>	<b>300</b>	
	<b>Subtotal for Panhandle</b>	<b>12.0</b>	<b>1.3</b>	<b>80,000</b>		
<b>Residential Area<sup>b</sup></b>	Neighborhood 1	19.0			97-116	Villa Homes and Vineyard Homes <sup>c</sup>
	Neighborhood 2	26.0			133-159	Vineyard Homes and Villa Homes
		8.0			64-96	Townhomes
	Neighborhood 3	16.0			82-98	Villa Homes and Vineyard Homes
		4.0			32-48	Townhomes
	Neighborhood 4	20.0			68-102	Vineyard Homes and Custom Homes
	Neighborhood 5	9.0			30-46	Custom Homes and Vineyard Homes
	<b>Subtotal for Residential Area</b>	<b>99.5</b>	<b>10.8</b>		<b>540<sup>d</sup></b>	Gross area densities will range by neighborhood from 3-8 units per acre
	<b>Employee Housing</b>	<b>3.0</b>	<b>0.3</b>		<b>54</b>	
<b>Parking</b>	Resort Area				385 sp.	For all uses in Resort Area
	Res. Neighborhoods				On-site pkg + 235 sp.	Includes on-site parking for for-sale units plus 135 guest spaces in designated areas; 100 on-site spaces for employee housing
	Panhandle				260 sp.	160 for Wine Center; 100 for Winery
	Employee Parking Lot	2			200 sp.	
	Environmental Interp. Center				20 sp.	20 for public access
<b>Roads</b>	(and employee parking lot)	<b>21.0</b>	<b>2.3</b>			

Table III-1 *continued*

Area	Subarea	Acreage	% of Total	Square Footage	Units/ Spaces	Notes
Open Space	Golf Course	171.0				
	Private Neighborhood Parks	2.5				
	Lowlands Open Space	425.0				
	Environmental Interp. Center	--		3,000		To be located within Lowlands
	Highlands Open Space	118.0				
	<b>Subtotal for Open Space</b>	<b>716.5</b>	<b>78.1</b>	<b>3,000</b>		
<b>GRAND TOTALS</b>		<b>918.0</b>	<b>100.0</b>	<b>155,700</b>		

- <sup>a</sup> Resort acreage includes 2-acre maintenance building site near end of Stanly Lane.
- <sup>b</sup> Residential acreages here do not include 2.5 acres for private neighborhood parks which are shown under open space acreage.
- <sup>c</sup> Custom Homes have an average lot size of 9,000 square feet to 1 acre and home sizes from 2,800 to 3,800 square feet; Vineyard Homes have an average lot size of 6,000 to 8,000 square feet and homes from 2,300 to 3,200 square feet; Villa Homes have an average lot size of 5,000 to 6,000 square feet and homes from 1,900 to 2,500 square feet; Townhomes have an average lot size of 3,500 to 5,000 square feet and homes from 1,500 to 2,300 square feet.
- <sup>d</sup> The exact number of units will vary by neighborhood but will not exceed a maximum of 540 for-sale residential units and 54 employee housing units. The 1996 *Draft General Plan* Policy Document identified up to 600 residential units at Stanly Ranch. Note: In June 1998, the Planning Commission deleted specific information pertaining to the site and retained a "Study Area" designation.

Source: EDAW, 1997.



Source: EDAW, Inc. 1998.

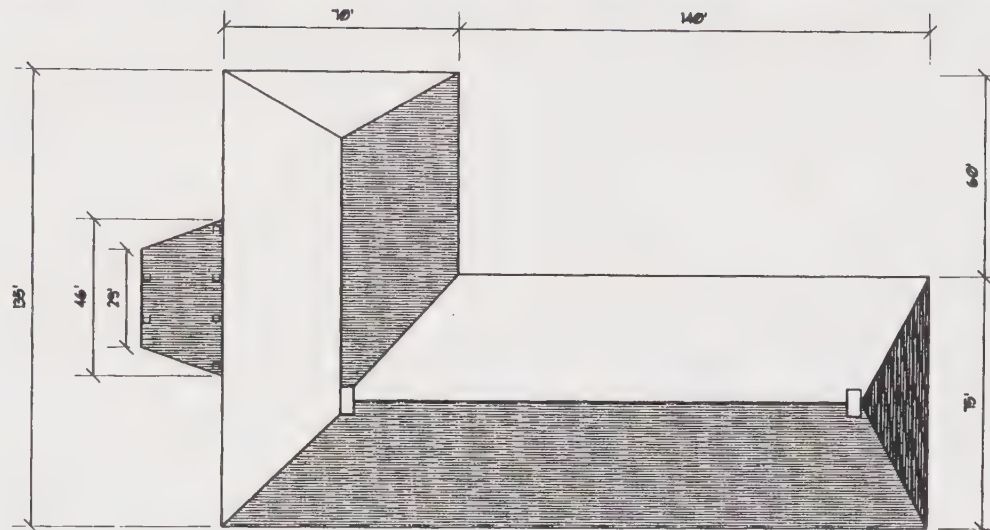
# **STANLY RANCH** **SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT**

Figure III-5  
Resort Area Layout





MAIN LODGE  
SECTION/ELEVATION



PLAN

ELEVATION DOES NOT MATCH ROOF PLAN, FOR CHARACTER ONLY.  
NOTE: BUILDING ELEVATIONS AND ROOF PLANS ARE APPROXIMATE ONLY AND SUBJECT TO FURTHER REFINEMENT.

SOURCE: EDAW 1997, SANDY AND BABCOCK.

# STANLY RANCH

SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT

Figure III-6  
Architectural Concept for Main Lodge

the main lodge would provide dining for up to 20 guests and a bar/lounge would seat up to 40 persons for light fare before and after dinner. Retail uses within the main lodge would include small shops offering sundries and quality gift and clothing merchandise. A total of 1,200 square feet of retail uses is proposed for the main lodge. (Note: All referenced square footages are gross square feet and would include space for hallways, circulation, restrooms and mechanical equipment.)

Meeting rooms and a ballroom for resort guests within the main lodge would total 14,000 square feet. It is expected that group events would generally have an attendance of between 25 and 50 persons. For conferences, up to 150 persons may be in attendance. Maximum capacity would allow 300-450 persons within the 4,500 square foot ballroom space.

Miscellaneous support uses within the main lodge would include 18,000 square feet for offices, maintenance, and lobbies. As noted in Table III-2, the main lodge would total of 45,200 square feet.

(2) Spa. The 12,000 square foot spa to be located on Cistern Hill in the resort area would include about 20 treatment rooms to provide a range of therapeutic services. Fitness rooms, saunas, jacuzzis and other similar facilities would also be provided within the spa which would be within walking distance of the main lodge. Limited retail services would be available within the spa. Outdoor facilities could include a lap pool and six to eight clay and hard surface tennis courts. The spa is proposed to be composed of four to five smaller structures, connected by vine-covered arbors. The central building would be the largest, with smaller structures stepping down the sides of Cistern Hill (see Figure III-7).

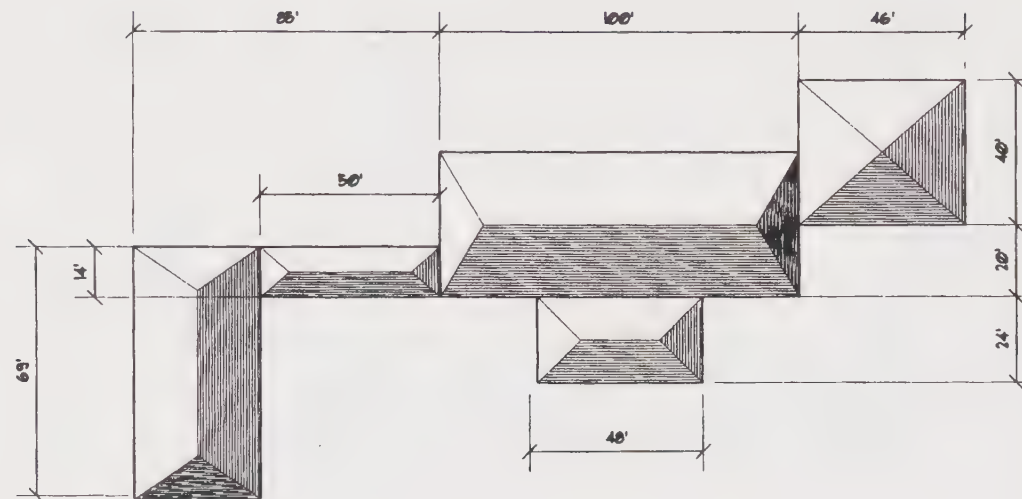
(3) Resort Units. Resort residential uses within the resort area would include 200 guest cottages, 25 units within the Carefree Club, and 75 resort homes. The guest cottages would each be about 800 square feet, while the Carefree Club and the resort home units would be about 2,300 square feet. The architectural concept for the guest cottages is shown in Figure III-8.

The guest cottages are envisioned as an extension of the lodge, composed of small one- and two-story cottages clustered around the lodge (see Figure III-5) in groups of 8 to 20 cottages in each cluster. These cottages would be owned by the resort and rented.

The Carefree Club units would be identical to the resort homes (i.e., about 2,300 square feet each) and would most likely operate in a timeshare fashion where the Carefree Club would own the units and an individual (or corporation, partnership, family trust) would own a share of that Club. This ownership share would allow for



SPA  
SECTION/ELEVATION



PLAN

NOTE: BUILDING ELEVATIONS AND ROOF PLANS ARE APPROXIMATE ONLY AND SUBJECT TO FURTHER REFINEMENT

SOURCE: EDAA 1997, SANDY AND BABCOCK.

# STANLY RANCH

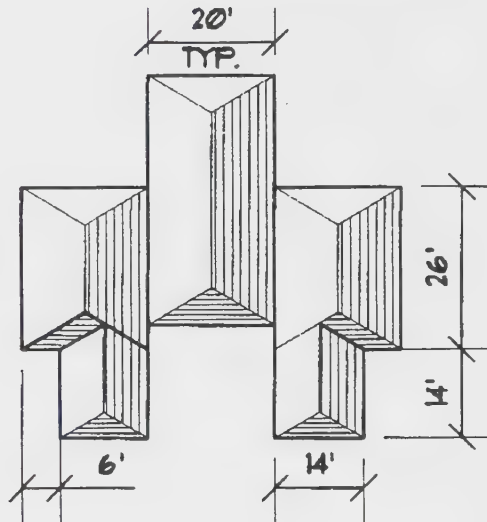
SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT

Figure III-7  
Architectural Concept for Spa





RESORT COTTAGES  
SECTION/ELEVATION



NOTE: BUILDING ELEVATIONS AND ROOF PLANS ARE APPROXIMATE ONLY AND SUBJECT TO FURTHER REFINEMENT.

SOURCE: EDRAW 1997, SANDY AND BARCOCK.

# STANLEY RANCH

SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT

Figure III-8  
Architectural Concept for Guest Cottages

**Table III-2  
RESORT PROGRAM**

Facility	Program <sup>a</sup>	Size <sup>a</sup> (Sq.Ft.)
Main Lodge		
• Restaurant(s)	220 seats	12,000 <sup>b</sup>
• Retail		1,200
• Conference Facility	Ballroom & Meeting Rooms	14,000
• Miscellaneous Support	Offices, Maintenance, Lobbies etc.	18,000
<b>Subtotal</b>		<b>45,200</b>
Spa	Treatment & Exercise Rooms, Retail Services	12,000 <sup>c</sup>
Golf Course		
• Clubhouse	170 seats	
- Restaurant(s)		4,600
- Golf Shop		1,200
- Miscellaneous Support (cart storage, lockers etc.)		5,200
• Maintenance		4,500
<b>Subtotal</b>		<b>27,500</b>
Guest Cottages	200 units (800 sq.ft. each)	160,000
Carefree Club	25 units (2,300 sq.ft. each)	57,500
Resort Homes	75 units (2,300 sq.ft. each)	172,500
<b>Subtotal</b>		<b>390,000</b>
<b>TOTAL</b>		<b>462,700</b>

<sup>a</sup> Program elements and sizes are approximate only and subject to further refinement at the tentative map phase. However, no more than 300 units in total are permitted within the resort area. All square footages are gross square feet (including stairwells, restrooms, hallways).

<sup>b</sup> Includes main location.

<sup>c</sup> Pool and tennis facilities would be additional square footages.

Source: EDAW, 1997.

a one-week stay at any of the four, five, or six resorts owned/operated by the Carefree Club. The units would have housekeeping, room service and other benefits enjoyed by the resort homes and guest cottages, and could be placed in a rental pool when not booked for Carefree Club use. At this time, the applicant has not identified the location of the Carefree Club units or whether they would be clustered together in one location or randomly spread throughout the project.

The 75 resort homes would be available for private/corporate purchase and would generally be located at the periphery of the resort between the first and second golf holes and the surrounding vineyards. Owners would be able to place these units in the rental pool managed by the resort; food and maid service and other benefits of the resort would be available to these units. Costs of these investor units would be higher than for similar units in nearby residential neighborhoods for those benefits. Experience at Silverado Resort finds that while some of their 278 units are

purchased for use as part time second homes, virtually none are permanently occupied (2 percent), and most are placed in the rental pool. At The Boulders, Arizona Carefree Resort, up to 25 percent of their 66 Resort Homes are permanently occupied. Based on this experience, the City might anticipate that 2-19 of the 75 resort homes might become permanently occupied.

(4) Golf Course Clubhouse and Maintenance. The golf clubhouse would be located directly across (southwest) Old Suscol Road from the main lodge on about six acres, and would be available for use by guests of the resort, residents, and the public (on a pay-for-play basis). The 11,000 square foot building would contain a pro shop, restaurant, social rooms, changing rooms, and cart storage underneath. An architectural concept for the Clubhouse is shown in Figure III-9. The restaurant would provide seating for 170 persons (within 4,600 square feet), and would offer breakfast, lunch, and dinner.

A small maintenance center of about 4,500 square feet on two acres would be located along Stanly Lane at the end of hole 6 (see Figure III-5). This maintenance center would house landscape materials and offices for maintenance personnel. The golf course is described below under "Open Space".

b. Panhandle Area. The panhandle area adjoins Stanly Lane near SR 12/121. This area would include a winery and a wine center on 12 acres. Two hundred sixty (260) parking spaces are proposed for these uses, which would include 160 spaces for the wine center and 100 spaces for the winery (see Table III-3).

**Table III-3**  
**PANHANDLE VISITOR-SERVING**  
**COMMERCIAL PROGRAM**

Facility	Program	Size (Sq.Ft.)	Acres <sup>a</sup>
Wine Center	Retail, restaurant, and commercial, visitor-serving uses	Up to 40,000	7
Winery	Complete winemaking functions	Up to 40,000	5
<b>Total</b>		<b>80,000</b>	<b>12</b>

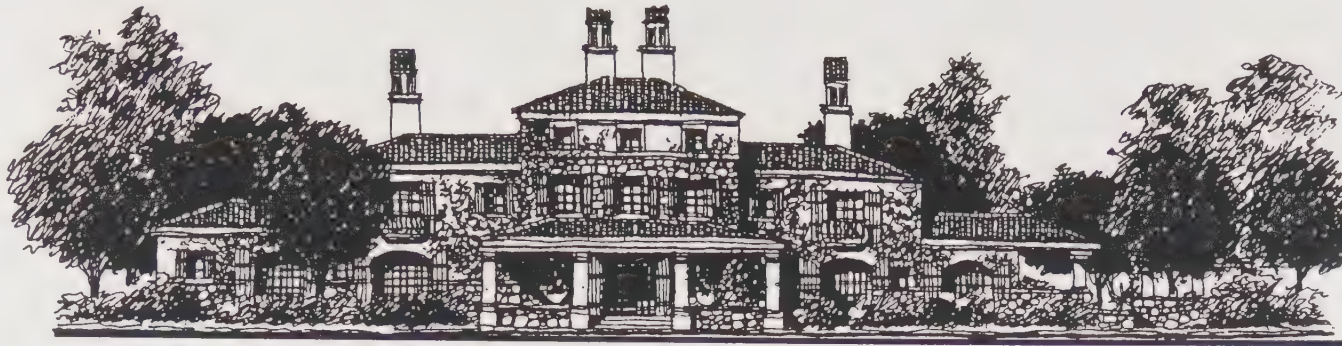
<sup>a</sup> Acreage figures are estimates only and will be refined at the Tentative Map stage.

Source: EDAW, 1997.

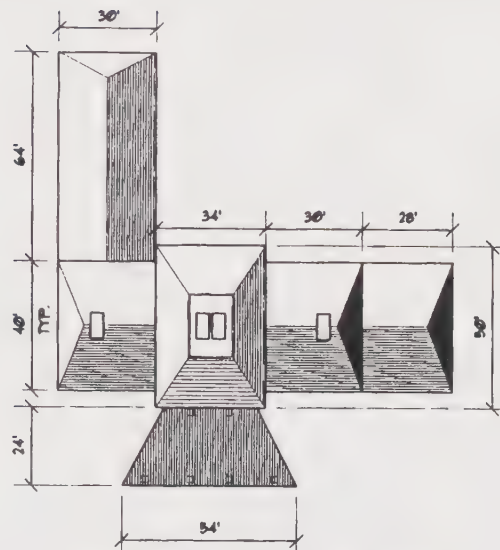
The wine center would include up to 40,000 square feet of development for retail space, a restaurant and a wine-tasting room. A small grocery store for Stanly Ranch residents and visitors (e.g., bicyclists, resort guests, etc.) would also be included. Architectural concept drawings for the wine center and winery are provided in Figures III-10 and 11.

The winery would include complete wine-making functions within 40,000 square feet for production of about 50,000 cases annually. The buildings would be adjacent to the wine center, and would house winemaking functions (e.g., fermenting, storage, and bottling) and associated maintenance activities. A retail sales and tasting area





GOLF CLUBHOUSE  
SECTION/ELEVATION



PLAN

NOTE: BUILDING ELEVATIONS AND ROOF PLANS ARE APPROXIMATE ONLY AND SUBJECT TO FURTHER REFINEMENT.

SOURCE: EDRAW 1997, SANDY AND BABCOCK.

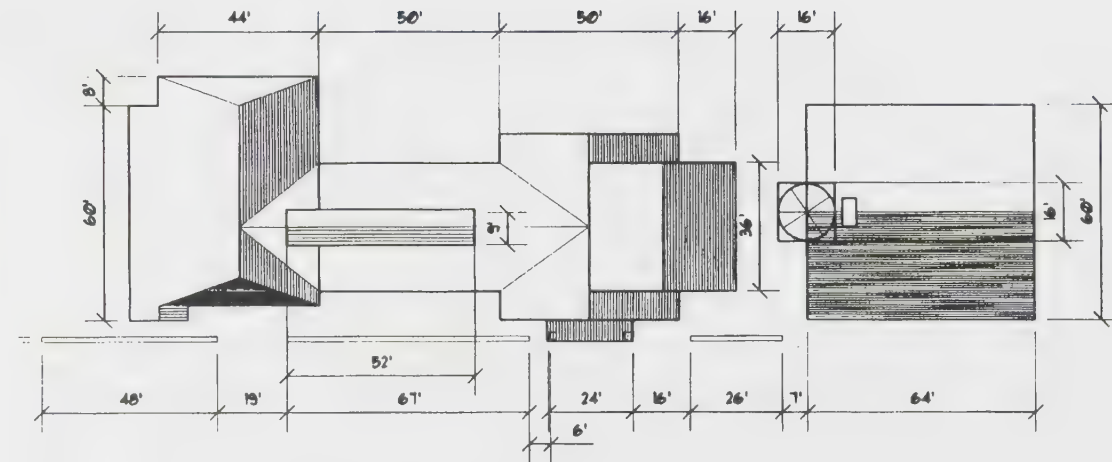
# STANLY RANCH

SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT

Figure III-9  
Architectural Concept for Clubhouse



WINE CENTER  
SECTION/ELEVATION



PLAN

NOTE: BUILDING ELEVATIONS AND ROOF PLANS ARE APPROXIMATE ONLY AND SUBJECT TO FURTHER REFINEMENT.

SOURCE: EDRAW 1997, SANDY AND BABCOCK.

# STANLEY RANCH

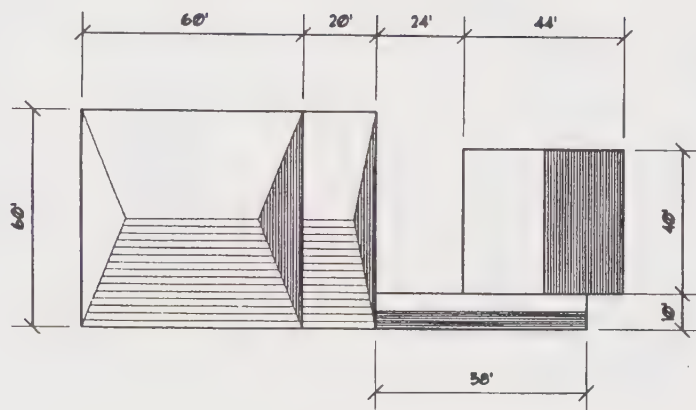
SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT

Figure III-10  
Architectural Concept for Wine Center

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WINERY  
SECTION/ELEVATION



PLAN

NOTE: BUILDING ELEVATIONS AND ROOF PLANS ARE APPROXIMATE ONLY AND SUBJECT TO FURTHER REFINEMENT.

SOURCE: EDAW 1997, SANDY AND BABCOCK.

# STANLY RANCH

SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT

Figure III-11  
Architectural Concept for Winery

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would also be provided. Landscaping with vineyards would surround the main buildings and parking area.

See subsection j. for alternative fire station location within the panhandle area.

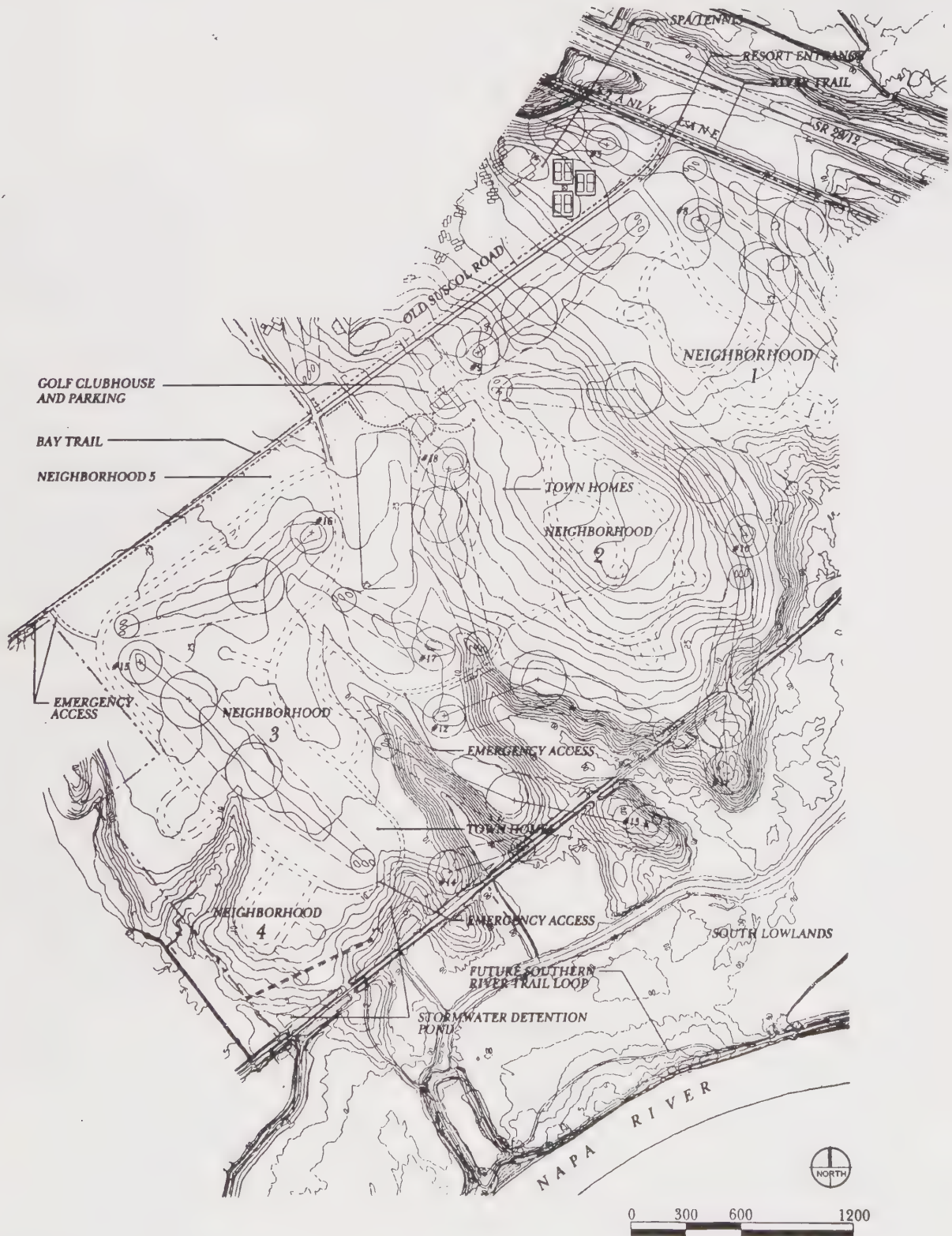
c. Residential Neighborhoods. The residential area of the Stanly Ranch project would be comprised of five neighborhoods of varying densities (see Table III-1 and Figure III-12). These residential neighborhoods would be located at the southern portion of the site, south of SR 29/12 and southwest of Old Suscol Road (see Figure III-5). Up to 540 homes within five neighborhoods would be provided. In addition, 54 units of employee housing (10 percent of the 540 for-sale homes) would be provided at the northeast end of the residential area near SR 29/12 (see Figure III-13).

(1) Neighborhood 1 - Cistern Ridge. Neighborhood 1 would be the first neighborhood encountered upon entering the Stanly Ranch from Stanly Lane and Old Suscol Road. The home types proposed would be vineyard homes and villa homes on lots ranging in size from 5,000 to 8,000 square feet. A total of 97 to 116 homes are proposed in this 19-acre residential neighborhood (see Table III-4). Gross density would range from 5.1 to 6.1 units per acre.

(2) Neighborhood 2 - Home Hill. Neighborhood 2 would be accessed from a road just east of the golf clubhouse that would connect with Old Suscol Road (see Figure III-12). The home types proposed would be vineyard homes and villa homes similar to Neighborhood 1, as well as townhomes. A range of 133 to 159 villa and vineyard homes are proposed for 26 acres within Neighborhood 2, with gross densities of 5.1 to 6.1 units per acre. Sixty-four (64) to 96 townhomes are proposed for 8 acres within the same neighborhood (see Table III-4). The gross density for the townhomes would range from 8 to 12 units per acre. The overall neighborhood density would range from 5.8 to 7.5 units per gross acre. Sketches for residential building prototypes are provided in Appendix C.

(3) Neighborhood 3 - The Vineyard. This neighborhood would be surrounded by golf holes 12 through 17. The types of housing would be similar to Neighborhood 2, but on a reduced acreage. A range of 82 to 98 vineyard and villa homes would be provided on 16 acres, and 32 to 48 townhomes would be provided on four acres. The number of units per acre would be similar to Neighborhood 2 for the same housing types (see Table III-4).

(4) Neighborhood 4 - West View. Neighborhood 4 faces the westernmost portion of the site. Due to its location, this may be the last neighborhood to be developed. The proposed housing types are custom homes and vineyard homes. A



Source: EDAW, 1998.

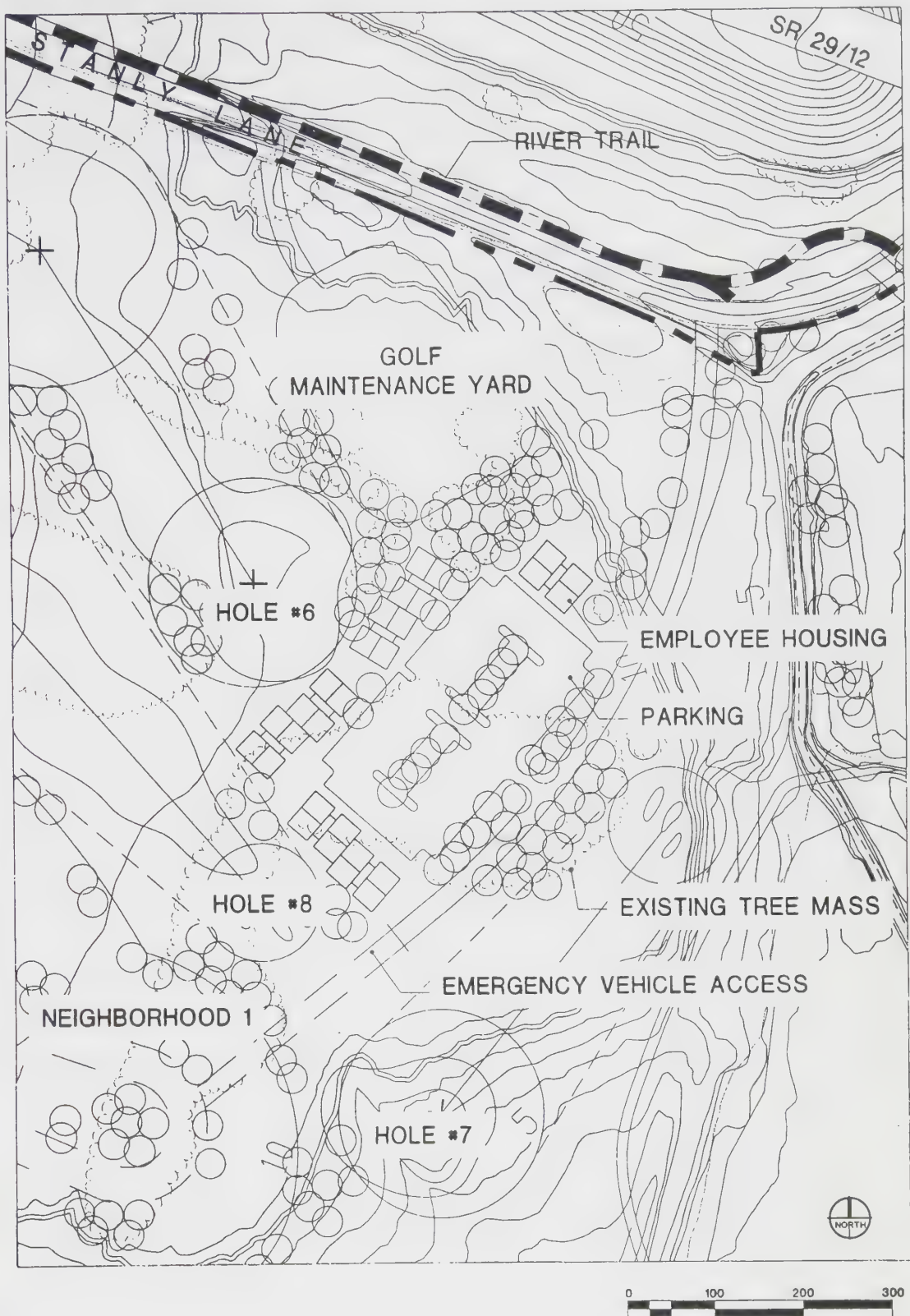
# STANLY RANCH

SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT

Figure III-12  
Map of Residential Neighborhoods

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Source: EDAW, 1998.

# STANLEY RANCH

## SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT

Figure III-13  
Site Plan for Employee Housing Area

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**Table III-4  
RESIDENTIAL DEVELOPMENT PROGRAM**

N'hood/ Parcel	Gross Acreage <sup>a</sup>	Anticipated Housing Type	Home Type Range <sup>b</sup>	Gross Density Range <sup>c</sup>
1/C	19	Vineyard Homes & Villa Homes	97-116	5.1-6.1
2/D	26	Vineyard Homes	133-159	5.1-6.1
	8	Townhomes	64-96	8.0-12.0
	34	Total for Neighborhood	197-255	5.8-7.5
3/E	16	Vineyard Homes & Villa Homes	82-98	5.1-6.1
	4	Townhomes	32-48	8.0-12.0
	20	Total for Neighborhood	114-146	5.7-7.3
4/F	20	Custom Homes & Vineyard Homes	68-102	3.4-5.1
5/G	9	Custom Homes & Vineyard Homes	30-46	3.4-5.1
H	3	Employee Housing (Apartments)	Up to 54	18.0
<b>Total</b>	<b>105</b>		<b>594<sup>d</sup></b>	<b>5.7 du/ac<sup>e</sup></b>

- <sup>a</sup> Gross acreage for each neighborhood includes private open space/parks and residential streets. All acreages are approximate and will be determined at tentative tract map stage.
- <sup>b</sup> Home Type Range will depend on the percentage of anticipated products planned for each neighborhood. The actual number of units constructed in neighborhoods 1-5 would be closer to the lower number, because the total number of units proposed for the market rate neighborhoods shall not exceed 540.
- <sup>c</sup> Gross densities are derived from dividing total units by neighborhood acreage. Lot sizes for custom homes range from 9,000 sq.ft to one acre; for vineyard homes 6,000-8,000 sq.ft, and villa homes from 5,000-6,000 sq.ft. Lot sizes for townhomes or similar product types are anticipated to be approximately 3,500-5,000 sq.ft.
- <sup>d</sup> Total number of residential units (non-resort) that can be considered for the property was 600 per the 1996 Draft Policy Document, City of Napa General Plan. The Draft SRSP assumes a maximum of 540 for-sale residential units and 54 employee housing units. Note: The Planning Commission in June, 1998 recommended deletion of specific information pertaining to Stanly Ranch and retention of "Study Area" designation.
- <sup>e</sup> Overall average gross density is 5.7 du./ac.

total of 68 to 102 of these units are proposed for this 20-acre neighborhood, with a gross density range of 3.4 to 5.1 units per acre (see Table III-4).

(5) Neighborhood 5 - Suscol. Neighborhood 5, the smallest of the five neighborhoods, would border Old Suscol Road. Only custom homes and vineyard homes are proposed for this area. A total of 30 to 46 homes would be developed on 9 acres, for a gross density range of 3.4 to 5.1 units per acre.

(6) Employee Housing. The project applicants have proposed construction of up to 54 units of employee housing on three acres located at the north-eastern end of the residential area adjacent to the golf course and south of SR 29/12 (see Figure III-13). The total number of units are proposed to be 10 percent of the 540

approved for-sale residential units. Gross densities would be a maximum of 18 units/acre. Each unit would be a one-story flat in modules of 8 to 16 units per two-story building. Architectural concepts for the employee housing are shown in Appendix C.

Employee housing units would be occupied only by Stanly Ranch employees and provided on a rental basis at rents that meet the criteria for very low to lower income units as determined by the Housing Authority of the City of Napa.

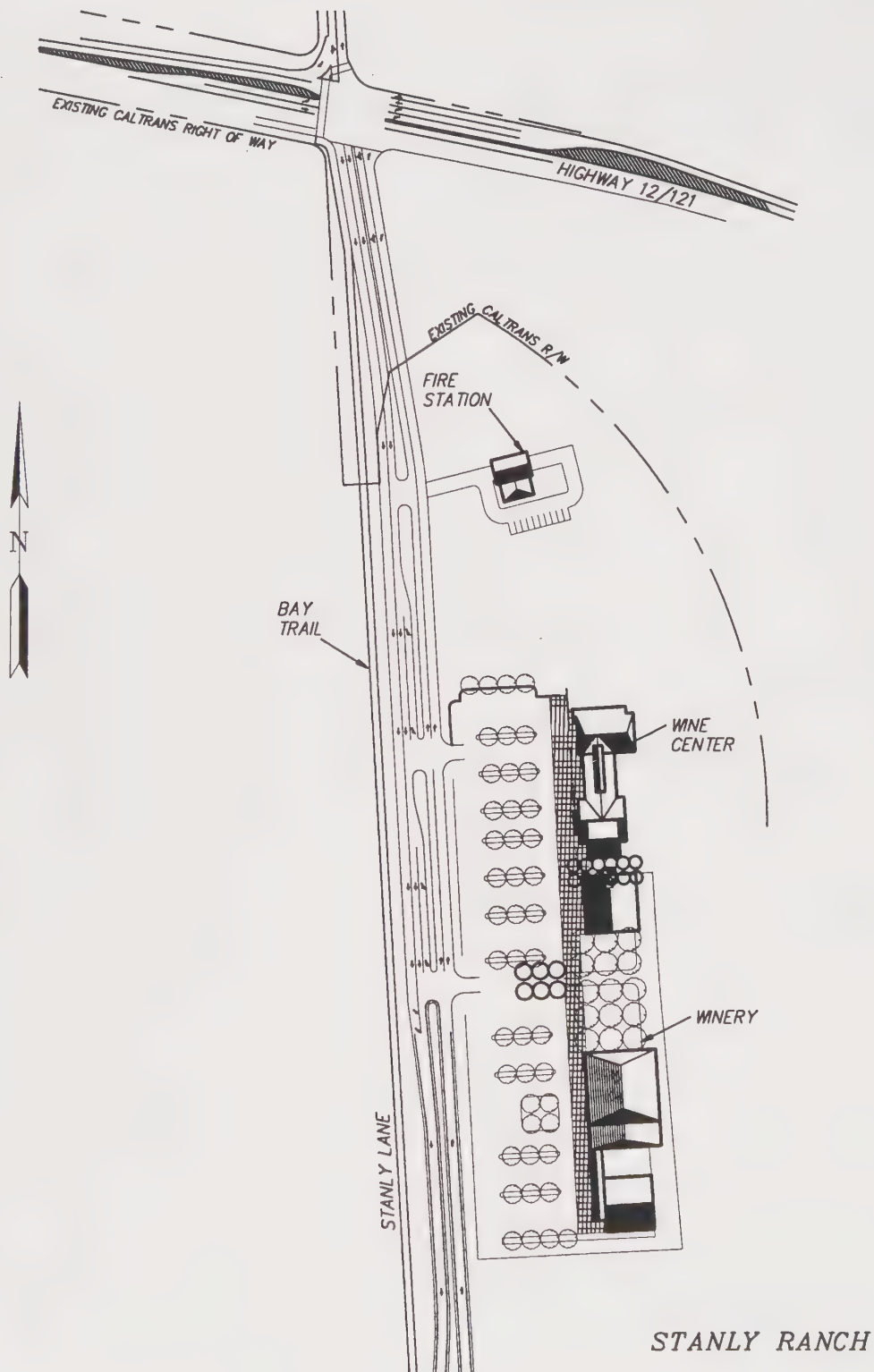
d. Environmental Interpretive Center. A small educational facility is proposed adjacent to the employee parking area near the end of Stanly Lane. The facility is not expected to exceed 3,000 square feet and would not be permanently staffed. It would be available for self-guided tours by residents, visitors and school groups. The applicant proposes to relocate the existing Stanly Ranch office or another existing building on the property for use as the Interpretive Center building.

e. Parking. A total of 1,100 parking spaces would be provided on the site in addition to the on-site parking for individual homes (see Table III-1). The majority (385 spaces) of these spaces would be provided at the resort area to provide parking for the spa, main lodge, and golf clubhouse. In the residential neighborhoods, on-site parking would be provided for for-sale units, and an additional 135 spaces would be provided for guest spaces in designated areas. A total of 100 spaces would be provided on the employee housing site. In the panhandle area, 160 spaces would be provided for the wine center and 100 spaces would be provided for the winery in a joint parking lot. A separate employee parking lot would be provided at the south end of Stanly Lane for up to 220 parking spaces, including 20 spaces for the Environmental Interpretive Center and public trail access.

f. Streets. A total of 19 acres would be developed with new or widened internal streets (see Figure III-14). They include Stanly Lane, which provides access into the site from SR 12/121; Old Suscol Road, which provides access to the resort and residential neighborhoods; several neighborhood streets; and a resort area loop street.

The intersection of Stanly Lane and SR 12/121 would be signalized as part of the project. Stanly Lane would be a public four-lane street to the entrance to the winery and wine center about 1,400 feet south of the intersection with SR 12/121. Left turn pockets would be provided in this segment to serve the wine center and winery. South of the winery, Stanly Lane would narrow to provide one lane in each direction, and would become a private street.

In its northern reach until near the intersection with SR 12/121, Stanly Lane would be relocated 30 to 40 feet to the east (see Figure III-14). South of the main bend in



Source: EDAW, Ruggeri-Jensen-Azar & Associates, Philip Williams & Associates.

# STANLY RANCH

SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT

Figure III-14  
Stanly Lane Entry Area and Major Intersection Improvements

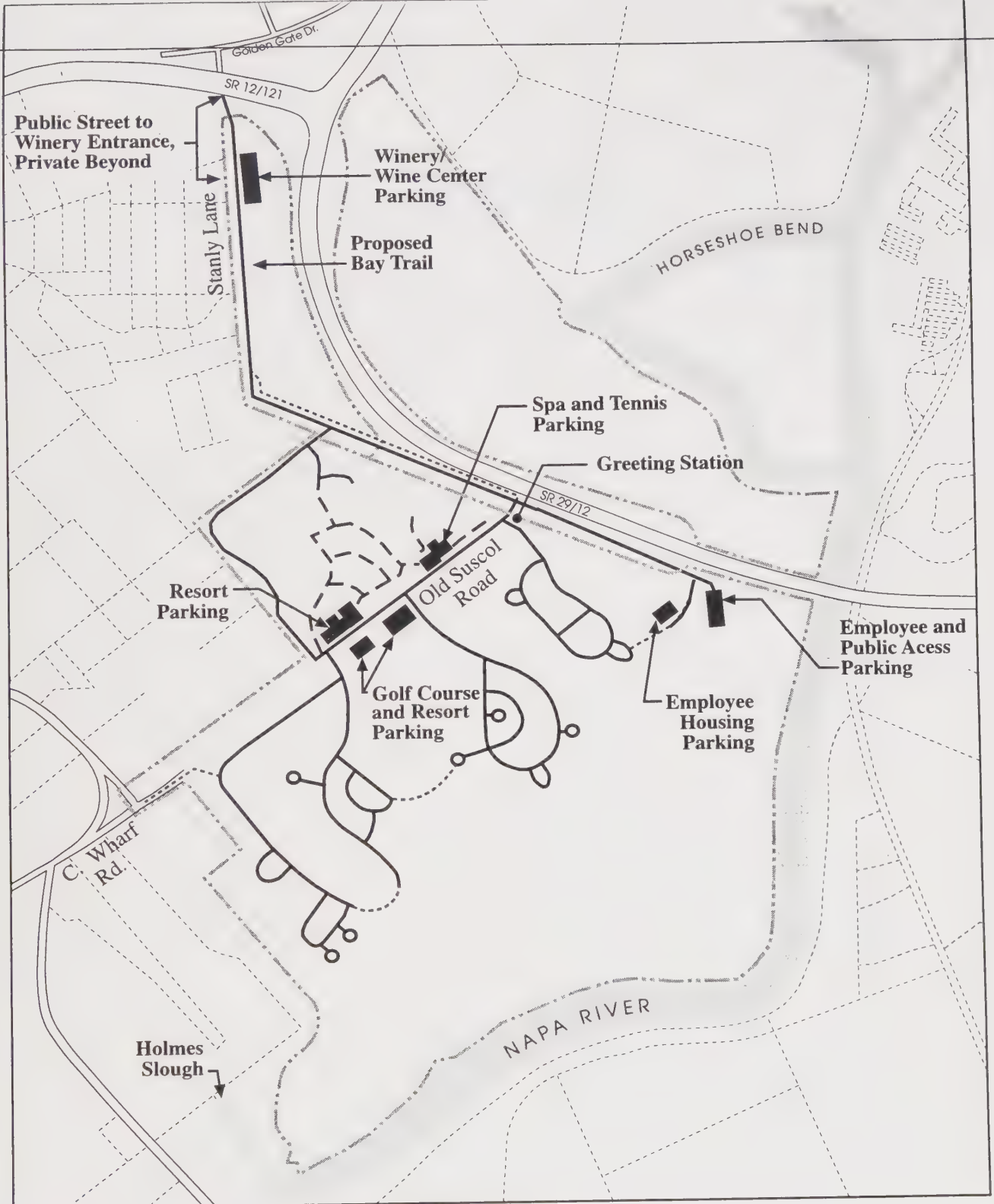


the road, Stanly Lane would be relocated 30 to 40 feet to the southwest. The relocation would have the following associated benefits: 1) implementation of an improved tree replanting plan described below (replanting of existing windrows would be constrained by gas and water mains); 2) provision of a Bay Trail alignment along the west side of Stanly Lane which avoids the wine center and winery driveways and busiest turn movements at the 12/121 intersection; 3) preservation of the historic bridges along Stanly Lane as part of the Bay Trail; 4) avoidance of project impacts on the high pressure gas main; and 5) location of the water main under the street which is a preferred location.

Old Suscol Road, a private street, would serve as a major access into the development and would have one lane in each direction. A greeting station would be located near its intersection with Stanly Lane. Other streets would be private, two lane streets. Gates may be located at some residential street entrances. An emergency access road would connect to Cuttings Wharf Road and would be designed for emergency use only.

Emergency Vehicle Access (EVA) would be provided in a number of ways. Stanly Lane would be designed to have sufficient width for emergency vehicles. Where Stanly Lane narrows to two lanes, the separated Bay Trail bicycle/pedestrian path would also be designed to accommodate emergency vehicles as an alternative to Stanly Lane. EVA at-grade crossovers would be located periodically along the trail to allow emergency vehicles to cross between the trail and Stanly Lane. A second EVA point to the project would be an extension of the Neighborhood 5 street to Cuttings Wharf Road; this extension would not be open to normal vehicle access but would only be usable for emergency vehicles or in the event of an emergency. The project also includes EVA connections between the residential neighborhoods, and the internal roads and resort streets would be designed to accommodate emergency vehicles, as shown in Figure III-15.

g. Trails. Two separate public, pedestrian/bicycle trails are proposed as part of the project to help implement the City's bicycle and trail plans. The *Draft SRSP* proposes to dedicate and construct a Class 1 (separated) multi-use, 2.1-mile Bay trail connection through the site which connects to the designated bicycle routes on Golden Gate Drive north of the site and Cuttings Wharf Road west of the site (see Figure III-16). The project's circulation diagram indicates that the Bay Trail would be eight to ten feet wide with two-foot shoulders. The path would be located to the west of Stanly Lane for about one-mile where it would cross under the road to the east side. At the three-way stop intersection with Old Suscol and Stanly, it would cross to the north side of Old Suscol Road and continue west to Cuttings Wharf Road.

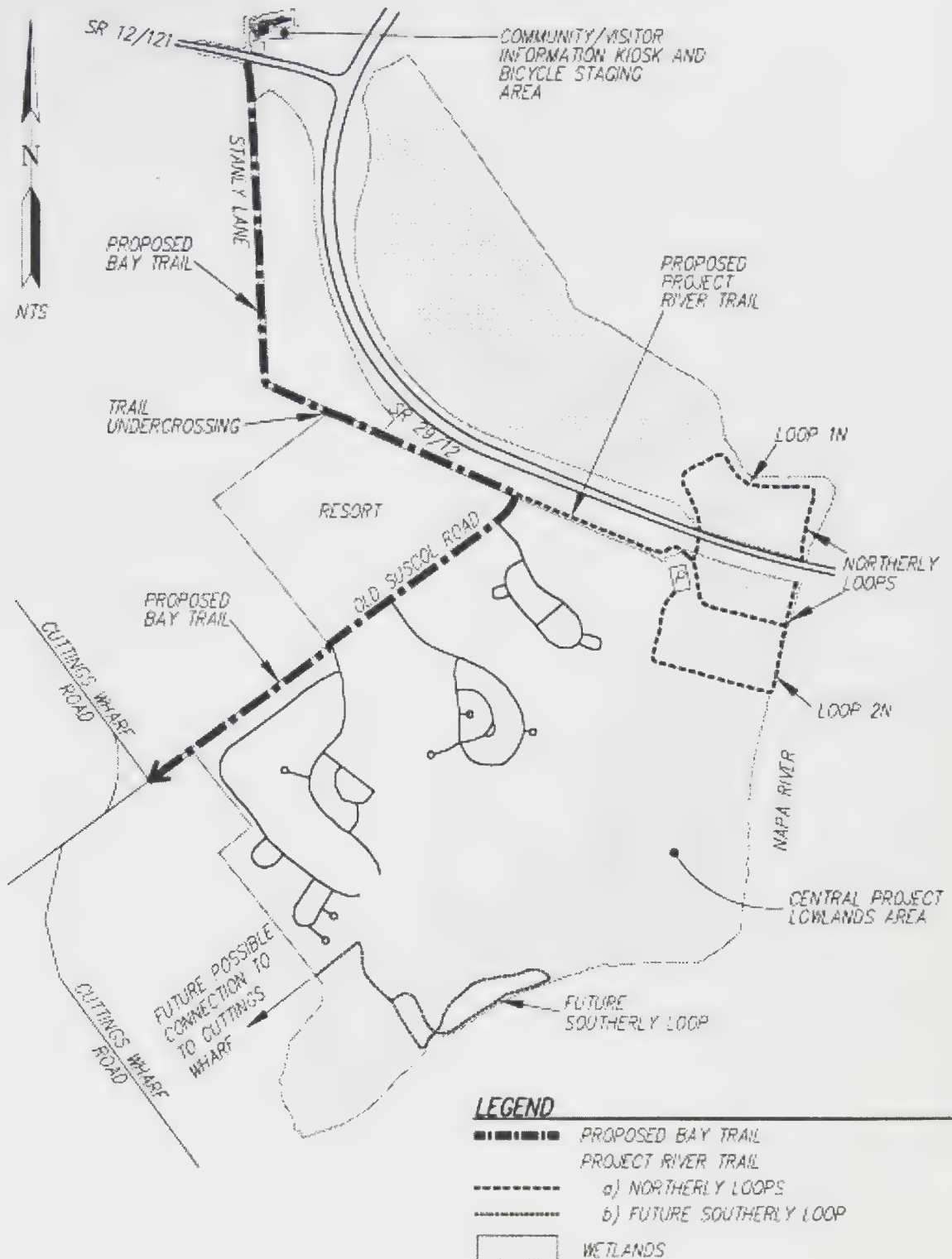


Source: EDAW, 1997

# **STANLEY RANCH** **SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT**

Figure III-15  
Internal Circulation and Parking

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Source: Ruggeri-Jensen-Azar & Associates

# STANLY RANCH

SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT

Figure III-16  
Proposed Public Trails



Additionally, the applicant proposes to dedicate and construct a 2.0-mile segment of the River Trail, described as part of a “multi use trail planned along the Napa River from the Stanly Ranch to Trancas Street” in the City’s Parks and Recreation Element. The City’s Trails Plan states that this trail is to connect to the marshes to the south across Stanly Ranch.

The following approach is proposed by the applicant to provide a trail fulfilling objectives of reaching the marshes and river on the Stanly Ranch property; provide enjoyable walks and rides; complement proposed land uses; avoid sensitive wetland areas; and not preclude possible future trails connections to the southwest of the City limits. Figure III-16 shows the following:

(1) Proposed Project River Trail. This 2.0-mile-long trail would extend along Stanly Lane from Old Suscol Road to an employee-public parking lot and continue to a set of southerly loops near the Highway 29 bridge. One loop crosses under the SR 29/12 bridge and follows the upper elevation areas of this part of the Lowlands (Loop 1N). A second loop follows the upper elevation areas south to the PG&E easements, then returns along the PG&E access road to the parking lot (Loop 2N). The trail alignment is nearly completely on the upper elevation (non wetland) land segments.

(2) Project River Trail (Future Addition.) In order to keep future trail options open, a second one-mile long loop trail has been identified and evaluated, although feasibility of an extension through County lands off-site is unknown and is beyond the scope of this document. In the event a trail were extended along a historic railroad bed from Cuttings Wharf Road, this trail would follow an upland alignment across the South Lowlands to the river levee where upper elevation lands could be used for a loop trail. The applicant refers to this potential trail as the Future Southerly Loop. The project would make irrevocable offers of dedication for this southerly loop with the Final Map or an appropriate time specified in the Development Agreement. The trail easement could be accepted and the trails constructed by the City when/if desired. Meanwhile, the trail would be defined and improved to a limited extent for use by project residents.

The City Trails Plan, endorsed by the City Council in 1994 and included in the *Draft General Plan* states “Details of the final alignment and environmental considerations of the [river] trail in this area will be considered in the Stanly Ranch Specific Plan and EIR.” To assist in the evaluation, two alternative river trail alignments identified by the City have also been evaluated. The alternative trail alignments are addressed in Appendix D as to their impacts and feasibility.

h. Trees. The May, 1997, *Draft SRSP* intended to preserve the eucalyptus windrows along Stanly Lane and Old Suscol Road and other trees on-site. To

evaluate the feasibility and potential impacts of this approach for the EIR, the City required that the applicant prepare an arborist's report as well as a peer review of the report. In late 1997, the arborist's evaluation concluded that about 60 percent of the existing on-site eucalyptus were either dead or in poor condition in large measure due to infestation by the eucalyptus leaf borer, a beetle introduced into California in 1984 and now prevalent in the Napa region. As a result, the windrows are subject to hazardous structural defects and pose a safety concern. Structural issues include sudden limb failure, freeze damage, windrow planting density effects, multi-trunk trees with attachment defects, fire damage and root decay. The report recommended removal of most of the trees due to their poor health and structural condition.

In January, 1998, the applicant prepared a "Windrow Replacement and Management Plan" (EDAW et al., 1998). The plan proposes removal of up to 2,600 of the 2,800 eucalyptus trees along Stanly Lane and Old Suscol Road, and retention of about 200 trees. All trees to be retained are along Stanly Lane to maintain the visual effect of the windrow while replanted trees are growing. The plan proposes replanting of 1,900 varied tree species in place of those removed. About half of the retained trees would be located along the west side of Stanly Lane from the intersection with SR 12/121 to the bend in the road. Southeast of the bend, the remaining half would be saved along the east side of Stanly Lane.

A total of 1,400 trees would be planted along Stanly Lane in place of 1,600 to be removed, and 500 along Old Suscol Road in place of 1,000 to be removed. A mixture of conifers, naturalized and ornamental trees would be planted such as redwoods, Lombardy popular, and other species. Proposed tree species are further described in the Windrow Replacement and Management Plan (EDAW et al., 1998).

Of the other trees on-site, about 150 would be retained generally west of Neighborhood One and in the vicinity of the golf clubhouse. Most eucalyptus along the levees would be retained. Other trees in the windrows more interior to the site would not be retained.

In 1998, City staff asked for an independent arborist review of the eucalyptus tree evaluation report prepared by James MacNair and submitted by the applicant; the independent review was also to consider a prior peer review to resolve some differences of opinion as to the trees' health and safety, and recommended future management options. Specifically, the arborist was asked whether the proposed removal of eucalyptus trees is an effect "caused" by the proposed Stanly Ranch project, or has the health and/or safety of the trees deteriorated to a point that most, if not all, should be removed regardless of what occurs on the site in the future. City staff also asked if nothing were to happen on the site, what is expected to happen to the trees in the next 5-10 years, and what would be his recommendation as the best option for future tree management.

The arborist concluded:

“The eucalyptus stand is rapidly declining and is in a largely decadent and unsafe condition. These trees are becoming increasingly more susceptible to insects and disease, adverse environmental conditions, and storm influences. Fire, frost damage, drought, over-crowding, topping, decay, insect and disease damage, soil compaction from cattle, neglect and age have all played a role in the stand’s decline. I predict these factors in concert with the eucalyptus long horned borer, a new pest recently in the stand, will decimate the tree population within five to ten years.”

He further stated that:

“Basal fire scars, typically indicating significant lower trunk and root decay, are evident on many of the trees. Appreciable numbers of dead and dying trees are evident within the stand. Many large dead branches killed by frost, and numerous broken branch stubs can be seen throughout much of the upper canopy. There is also a history of windthrow and branch breakage within the stand. Much of the east side of the road is fairly low and subject to seasonal flooding and saturated soil conditions, often leading to uprooting during strong winds. The stand’s extreme fire hazard is another reason for concern. ... Any land use that would result in regular vehicle traffic along the road, or place people, parking lots or structures near the windrow trees, in their present state, is extremely risky. The proposed project should not proceed unless immediate action is taken to abate the present safety hazard.

“Prudence dictates the removal of the unsafe and declining trees to ensure reasonable tree safety for the proposed project, or any land use, for that matter. Even if the site was (sic) preserved as public open space or a regional park where people and vehicles regularly use the road, the stand would have to be similarly managed.”

The arborist stated that at best, no more than 25 percent of the existing trees distributed throughout the stand could be considered reasonably healthy enough to be retained. He noted, however, that many of the healthier trees have significant structural defects that would preclude their retention, and all are subject to eucalyptus leaf borer.

His preferred management option would be to remove all of the trees on Stanly Lane and replant with native valley oaks, but he recognized the concern of the owners to retain a semblance of the windrow while newly planted trees achieve some height. He did not support topping, noting this is a substandard method of pruning, but recognized it probably minimizes hazards in the short term and provides effective



screening after 4-5 years, although trees should then be removed after 10 years. The third option of thinning and pruning would retain a more natural tree appearance but would provide limited screening and would not entirely eliminate the tree hazard potential (Hagen, 1998).

i. Infrastructure. A number of infrastructure improvements would be associated with the *Draft SRSP* development in addition to the roads and trails discussed above. Water and sewer lines would be constructed to serve all on-site development. The preferred wastewater treatment provider for the project is the Napa Sanitation District which would require a connection across the Napa River to this plant located east of the site via a pipe bored under the river. The second choice would be for the project to operate an on-site wastewater treatment/reclamation facility to process wastewater generated on-site for land application on the golf course and other landscaped areas within the project. This second choice is evaluated in more detail in Chapter V which addresses an alternative that includes an on-site wastewater facility. The applicant has also proposed installation of reclaimed water transmission lines and use of reclaimed water for golf course irrigation, landscaping for common areas, and possibly landscaping for private yards if practical. More detailed information regarding utilities can be found in Chapter IV of the EIR under "K. Public Utilities".

Other infrastructure to be developed would include a system of internal water mains to connect to the existing 36-inch water main that crosses the Napa River and enters Stanly Ranch in the Lowlands area south of SR 29/12 before running parallel to Stanly Lane and exiting the site at the Stanly Lane/SR 12/121 intersection (see Figures III-17 and III-18).

Stormwater runoff from streets and other impervious surface areas (rooftops and parking areas) would be directed by a street drainage program as shown in Figure III-19, connecting with a series of wet ponds, constructed wetlands, biofilter swales, and biofilter strips for stormwater treatment. Golf course runoff would be routed through grassy swales to provide water quality treatment benefits prior to discharge to the Lowlands.

Gas, electrical, and telecommunication lines would also be developed on the site to serve future uses. The applicant has proposed state-of-the-art telecommunication facilities including fiber optic cables necessary for current and future technological needs.

The levee bordering the river is proposed to be retained and maintained in its current condition through the project construction period. The levee is unnecessary for flood control protection due to the location of proposed development and floodplain requirements. Following completion of the project, the owners may consider other options, but such future options are not part of the project.

j. Fire Station and Off-Site Improvements. Off-site improvements proposed as part of the *Draft SRSP* include a stoplight at Stanly Lane and SR 12/121, with related widening of portions of 12/121 and 29/12.

To meet City fire service requirements, a City fire station would be constructed at either the northern end of the site adjacent to the 12/121/29 intersection or off the site on City-owned property immediately north of this intersection as shown in Figures III-20, III-21A, and III-21B.

The fire station is tentatively envisioned to consist of a 5,000-6,000 square-foot structure containing offices, operations and living space, a two bay oversize garage with drive through and ten parking spaces (City of Napa, Hasser, 1997).

The off-site proposed fire station property was conveyed by Caltrans to the City of Napa with the condition that it be used solely for park and recreation purposes, and the City deed states that use as a tourist information center/rest stop is consistent with park and recreation purposes. A November 1997 letter from Caltrans indicates that the City has flexibility to include a public fire station use at the site (Caltrans, 1997).

A fire station at this location is proposed to be integrated with the development of a bicycle staging area and rest stop that would include an information kiosk, rest rooms, drinking fountains, bicycle staging area, public parking, lawn area with picnic facilities and landscaping. The concept for the "combined facility," as expressed by the City of Napa, is to develop a park site that serves as both a bicycle starting point/rest stop for the Bay Trail. The kiosk or interpretive structure could include maps of the area showing bike routes, scenic destinations including downtown Napa and visitor information. Integration of the park site with the fire station would minimize vandalism and night time security problems (City of Napa, Carlsen, 1997).

k. Open Space. A total of 716.5 acres of open space (78 percent of the site) would be provided as part of the project. This open space would include the following elements: 1) golf course (171 acres); 2) private neighborhood parks (2.5 acres); 3) Highlands open space in and around the resort, wine center, winery, and residential areas (118 acres which would be partly used for vineyards); 4) a small Environmental Interpretive Center (less than ½ acre); and, 5) Lowlands open space (425 acres). Nearly all of the extensive Lowlands acreage lies within the 100-year floodplain along the Napa River (see Figure III-2). Grazing, which now occurs in this area, would be removed as part of the project.

(1) Golf Course. The golf course would be an 18-hole, champion level golf course totaling 179 acres including the golf clubhouse and maintenance facility. It



Proposed Water Line



Existing 36" Water Line

Source: EDAW, Ruggeri-Jensen-Azar, 1997.



# STANLEY RANCH



SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT

Figure III-17  
Proposed Water System

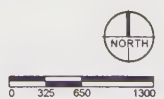
BRADY ■ LSA  
PLANNERS AND LANDSCAPE ARCHITECTS





-  Proposed Wastewater Line
-  Proposed Wastewater Main

Source: EDAW, Ruggeri-Jensen-Azar & Associates



# STANLEY RANCH

## SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT

Figure III-18  
Proposed Wastewater System

BRADY ■ LSA  
PLANNERS AND LANDSCAPE ARCHITECTS



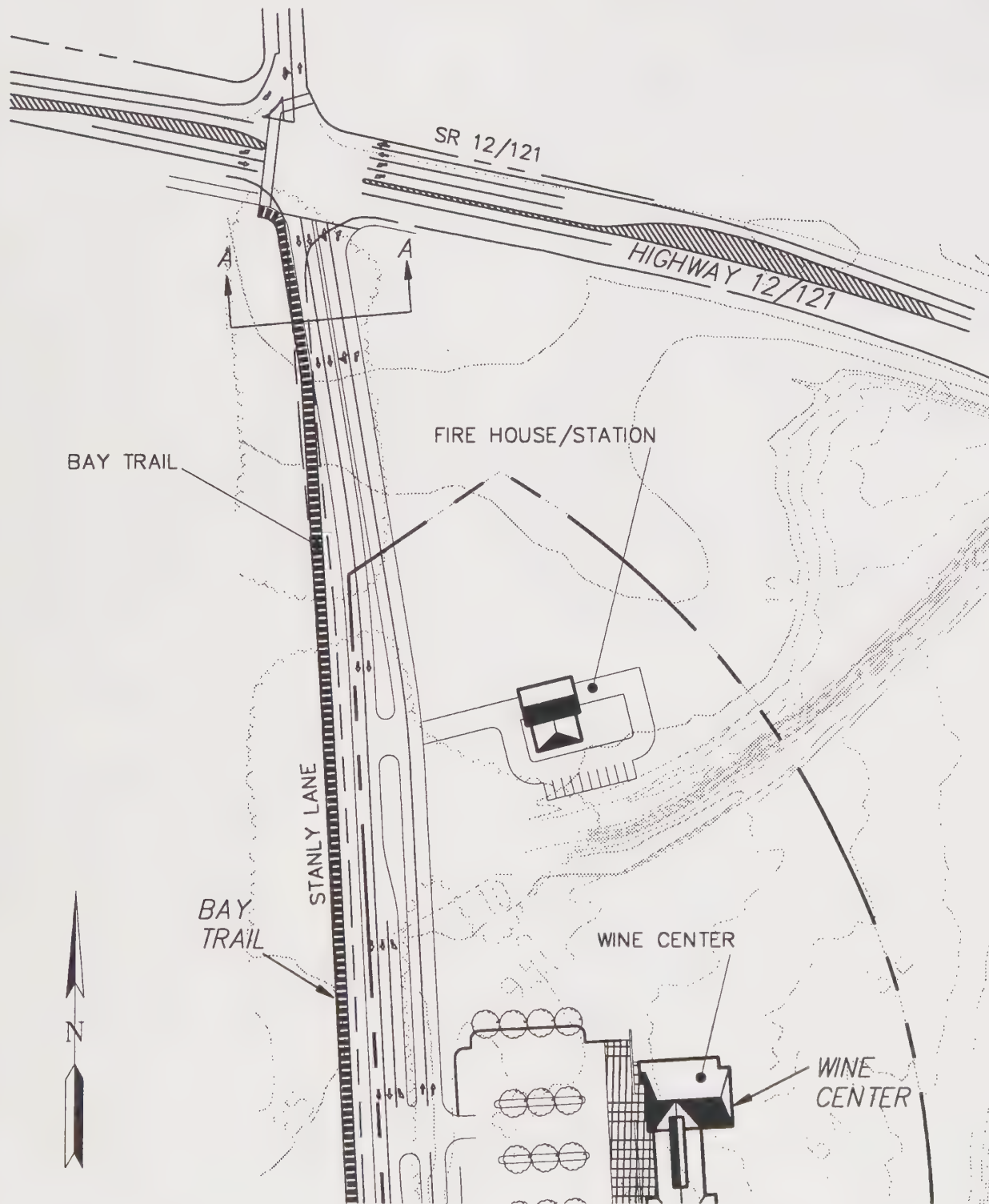
Source: EDAW, Ruggeri-Jensen-Azar & Associates, Philip Williams & Associates

# STANLEY RANCH

## SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT

Figure III-19  
Proposed Storm Drainage System

BRADY ■ LSA  
PLANNERS AND LANDSCAPE ARCHITECTS



Source: EDAW, 1997

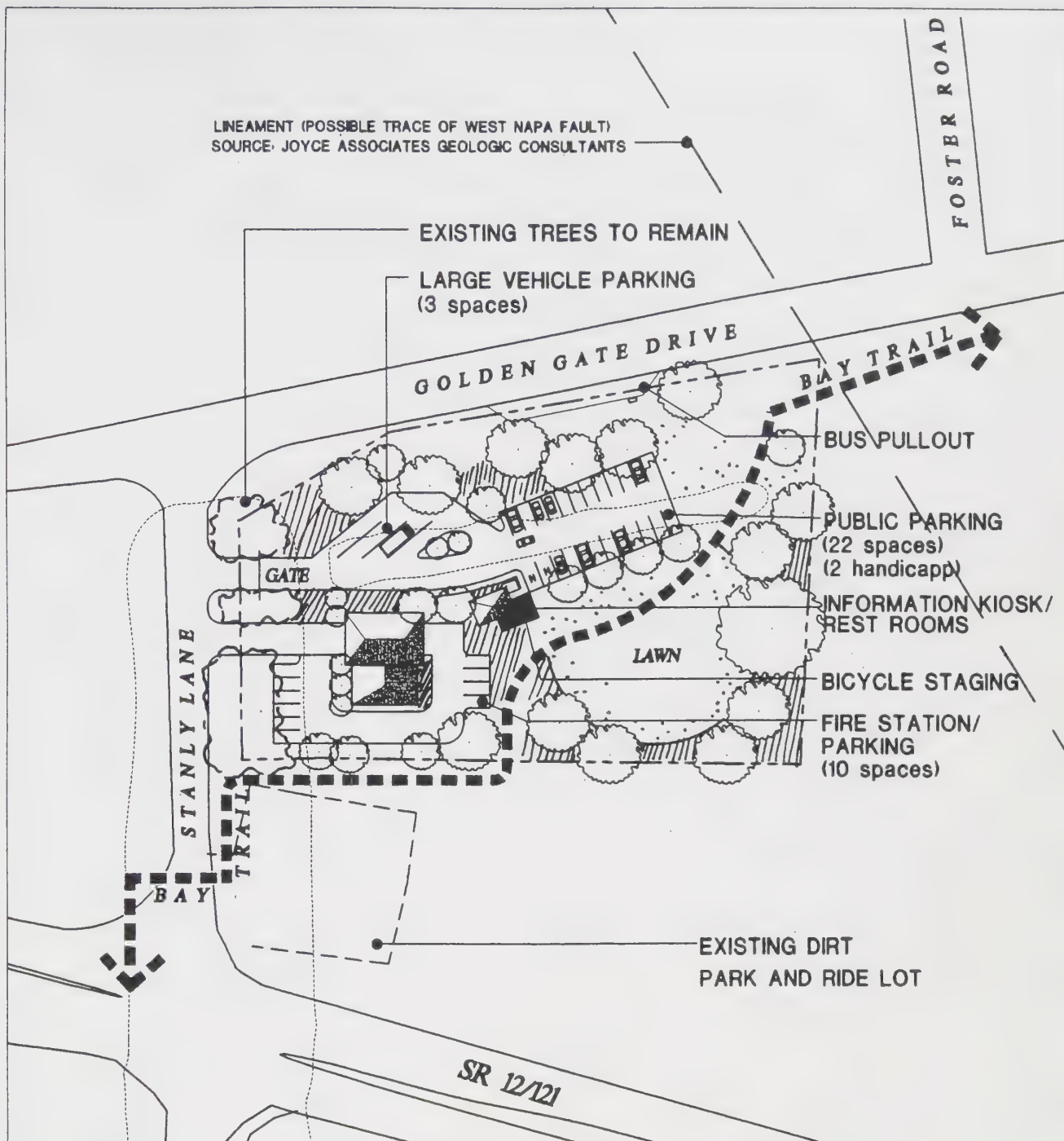
# STANLY RANCH

SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT

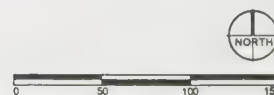
Figure III-20  
On-Site Fire Station Alternative

BRADY ■ LSA  
PLANNERS AND LANDSCAPE ARCHITECTS





Source: EDAW, 1997.

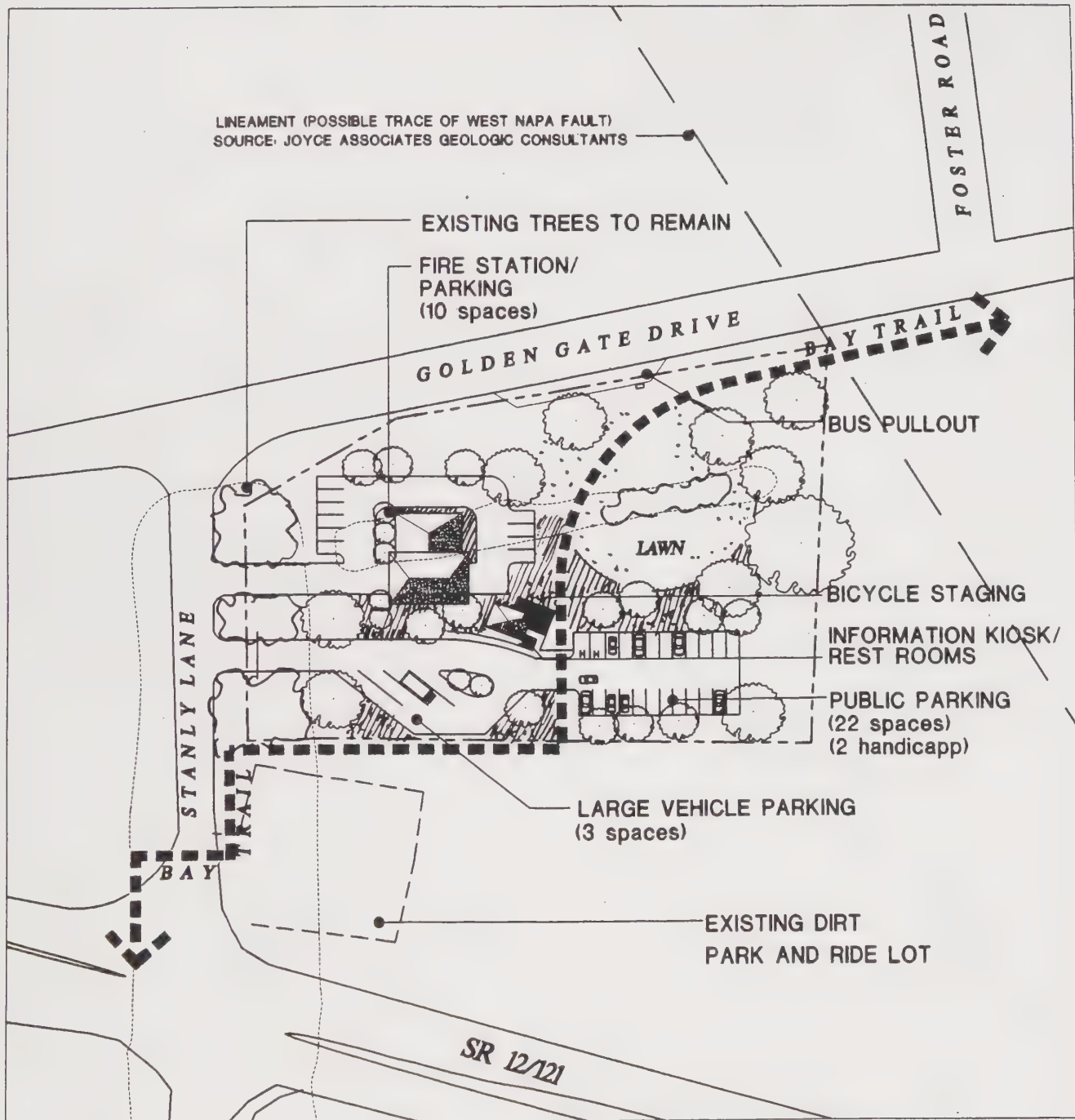


# STANLY RANCH

SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT

Figure III-21A  
Off-Site Fire Station Alternative

BRADY ■ LSA  
PLANNERS AND LANDSCAPE ARCHITECTS



Source: EDAW, 1997.

# STANLY RANCH

SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT

Figure III-21B  
Off-Site Fire Station Alternative

BRADY ■ LSA  
PLANNERS AND LANDSCAPE ARCHITECTS

would be privately owned and operated (see Figure III-4). Use of the golf course would be available to the public on a pay-to-play basis.

The golf course design follows the lower-lying drainage patterns within the Highlands. Water hazards would be incorporated into the overall site drainage master plan. Associated practice facilities would be located adjacent to the clubhouse, including a driving range and practice putting and chipping areas. The golf course would be designed to have two returning nines: the front nine would loop through the resort area, panhandle, and east of Home Hill, while the back nine would generally loop between Home Hill, the South Lowlands, and the western portion of the site. Total yardage estimates for the course are over 7,000 yards.

To avoid potential vehicular conflicts, the course plan incorporates an undercrossing of Stanly Lane to reach holes three and four. Other road crossings would occur at-grade and would be marked with signage. Changes to the road surface would be made as appropriate.

Best management practices (BMPs) would be employed in terms of pesticide and fertilizer use. A water conserving irrigation system is proposed.

The applicant states that no golf tournaments would be held, and that use of the golf course would be restricted to resort guests and the public. Thus, golf tournaments are not included as part of the project and are not evaluated by this EIR.

#### 4. Population and Employment

A residential population of about 1,515 persons would result from development allowed by the proposed *Draft SRSP*, assuming an average of 2.55 persons per household for the 594 dwelling units (54 of which would be employee housing). If the project attracts a higher number than the usual number of seniors and second home buyers, the actual population may be considerably lower. A total of 500 employees would be associated with the proposed commercial uses as shown in Table III-5.

**Table III-5  
EMPLOYMENT ASSOCIATED  
WITH PROPOSED LAND USES**

Area	Subarea	Estimated Number of Employees
Resort	Main Lodge	50
	- Restaurant	5
	- Retail	150
	- Conference Facility and Support	
	Spa	65
	Golf Clubhouse	
	- Restaurant; Golf Shop and Miscellaneous Support	30
	Maintenance	50
Panhandle	Wine Center	75
	Winery	75
<b>TOTAL</b>		<b>500</b>

Source: EDAW, 1997.



## 5. Development Phasing

The proposed project would be developed in several stages over a 10-year period or less, but two primary phases have been identified by the applicant as shown in Table III-6.

### D. Required Permits and Approvals

A number of permits and approvals would be required before development on the Stanly Ranch site would proceed. The City of Napa, as lead agency, would be responsible for the majority of approvals. Other agencies also have discretionary authority related to the project and would be responsible agencies (see Table III-7).

The General Plan Amendment package would include adoption of the *Draft SRSP* land uses and policies as those governing the specific design and future use of the site; incorporation of Level of Service standards consistent with the *Draft General Plan* for the area; and provision of exceptions to certain existing or *Draft General Plan* policies (depending on which Plan is applicable at time of Specific Plan consideration) as identified in the Public Policy section of Chapter IV of the EIR.

Trustee Agencies, identified as state agencies having legal jurisdiction over natural resources affected by a project which are held in trust for the people of the State of California, include the California Department of Fish and Game and the State Lands Commission.

**Table III-6  
PROPOSED PROJECT DEVELOPMENT PHASING**

<b>Phase One (Years 0-5)</b>	<b>Phase Two (Years 4-10)<sup>a</sup></b>
Rough grading of site per grading plan	Fine grading of Phase Two areas
Stanly Lane - 2 lanes SB from SR 12/121 intersection to just beyond winery entrance (no left turns and one lane outbound from Suscol Road to SR 12/121)	Stanly Lane - additional left turn pockets SB into the wine center and winery and additional lane NB from winery entrance to SR 12/121 intersection
Old Suscol Road from Stanly to end at emergency access connection	
Emergency access road from Cuttings Wharf Road to Neighborhood 5, with a temporary emergency access to Old Suscol Road until the street in Neighborhood 5 is constructed	
Employee parking lot with public access parking spaces	
Streets and emergency access for subdivision under construction	
Resort streets and accessways	Wine center and winery
Golf Course: fine grading golf holes, maintenance yard, golf clubhouse core building and parking	Golf clubhouse (balance)
Resort lodge and parking	
160 guest cottages at resort	Vineyard plantings by winery; remaining 40 cottage units
Spa and tennis facility	
50 units of resort homes/Carefree Club units	Remaining 50 resort homes/Carefree units
270 residential units in 2-4 neighborhoods	Remaining 270 residential units with streets, parks and landscaping; Environmental Interpretive Center
54 employee housing units	
Bay Trail from SR 12/121 to Cuttings Wharf Road	
Project River Trail	
Fire station (to be complete prior to project occupancy)	
Utilities: Napa Sanitation District (NSD) main connections or construction of on-site sewage treatment plant; overall storm drainage facilities installed; main water lines installed	Other utilities as required
Trees: removal of trees; new tree plantings along Stanly Lane and Old Suscol Road	
Other: landscaping in resort area wetland mitigation areas; riparian enhancement in resort area; conservation easement(s)	

<sup>a</sup> Some overlap of phases may occur.

Source: EDAW, 1997.

**Table III-7**  
**REQUIRED PERMITS AND APPROVALS**

Lead Agency	Permit/Approval
City of Napa	<ul style="list-style-type: none"> <li>• General Plan Amendment</li> <li>• Adoption of Specific Plan</li> <li>• Rezoning</li> <li>• Development Agreement</li> <li>• Tentative or Vesting Tentative and Final Subdivision Maps</li> <li>• Parcel Maps</li> <li>• Improvement Plans and Subdivision Agreements</li> <li>• Site Development Plan Review</li> <li>• Architectural Review Approvals</li> <li>• Use Permits (possibly)</li> <li>• Demolition Permits</li> <li>• Grading and Building Permits</li> <li>• Local benefit districts and/or public financing districts</li> </ul>
<b>Responsible Agencies</b>	
Napa Local Agency Formation Commission (LAFCO)	<ul style="list-style-type: none"> <li>• Approval of revised Sphere of Influence and annexation to the Napa Sanitation District (NSD).</li> <li>• Alternatively, if wastewater treatment capacity is unavailable from NSD, approval of formation of a community services district or similar special district to operate an on-site wastewater treatment/reclamation facility, unless the City were to agree to operate such a facility.</li> </ul>
Napa Sanitation District	<ul style="list-style-type: none"> <li>• Approval of annexation and permit to provide sewer service (in the principal (preferred) wastewater treatment alternative)</li> </ul>
Napa County	<ul style="list-style-type: none"> <li>• Encroachment permit for emergency access/Bay Trail connection to Cuttings Wharf Road</li> </ul>
State Department of Fish & Game	<ul style="list-style-type: none"> <li>• Streambed Alteration Permit</li> </ul>
State Department of Transportation (Caltrans)	<ul style="list-style-type: none"> <li>• Approval of plans and encroachment permit for a stoplight at Stanly Lane and any other highway modifications.</li> </ul>
State Regional Water Quality Control Board (RWQCB)	<ul style="list-style-type: none"> <li>• Project sponsors must file a Notice of Intent (NOI) with the RWQCB to operate under existing statewide general National Pollutant Discharge Elimination System (NPDES) permit for stormwater discharge.</li> <li>• Water Quality Certificate for Section 404 permits.</li> <li>• Waste Discharge Requirements Permit to operate an on-site wastewater treatment/reclamation facility (in the on-site wastewater treatment/reclamation alternative).</li> </ul>
U.S. Army Corps of Engineers (not technically a "responsible agency" although a Corps permit is needed]	<ul style="list-style-type: none"> <li>• Section 404 permit for less than 3 acres of wetland fill.</li> </ul>
<b>Trustee Agencies</b>	
State Department of Fish & Game	<ul style="list-style-type: none"> <li>• With regard to the fish and wildlife of the state, to designated rare or endangered native plants, to game refuges, ecological reserves, and other areas administered by the Department.</li> </ul>
State Lands Commission	<ul style="list-style-type: none"> <li>• With regard to state-owned "sovereign" lands such as beds of navigable waterways.</li> </ul>

Source: Brady/LSA and City of Napa (1997).



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## **Chapter IV**

### **SETTING, IMPACTS, AND MITIGATION MEASURES**

■ ■ ■

This chapter contains an analysis of each issue that has been identified through preliminary environmental analysis and the public scoping session for the Stanly Ranch project and, as such, constitutes the major portion of the Draft EIR. Sections A through O of this chapter describe the environmental setting of the project as it relates to each specific issue, the impacts resulting from implementation of the project and mitigation measures that would reduce impacts of the project.

#### **1. Determination of Significance**

Under CEQA, a significant effect is defined as a substantial, or potentially substantial, adverse change in the environment.<sup>1</sup> The guidelines implementing CEQA direct that this determination be based on scientific and factual data. Each impact and mitigation measure section of this chapter is prefaced by a summary of criteria of significance. These criteria have been developed using Appendix G of the CEQA Guidelines and applicable City policies, including the General Plan.

#### **2. Issues Addressed in the Draft EIR**

The following environmental issues are addressed in this chapter:

- Land Use
- Public Policy
- Transportation and Circulation
- Geology, Soils, and Seismicity
- Hydrology, Drainage, and Water Quality
- Biology
- Historic and Cultural Resources
- Visual Quality

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<sup>1</sup> Public Resources Code 21068.

- Population, Employment, and Housing
- Public Services
- Public Utilities
- Noise
- Air Quality
- Public Health and Safety

Preliminary analysis determined that the proposed project would not result in significant impacts to energy and mineral resources. Subsequently, this issue is not examined in this chapter of the EIR, but is briefly discussed in Chapter VI, CEQA Required Assessment Conclusions. Growth inducement is also addressed in Chapter VI.

### **3. Format of Issue Sections**

Each environmental issue section has two parts: 1) Setting, and 2) Impacts and Mitigation Measures of the proposed project.

Impacts are numbered and shown in bold type, and the corresponding mitigation measures are numbered and indented. Impacts and mitigation measures are numbered consecutively within each topic and begin with an acronymic reference to the impact section (e.g., LU). The following symbols are used for individual topics:

LU:	Land Use
POL:	Public Policy
TRANS:	Transportation and Circulation
GEO:	Geology, Soils, and Seismicity
HYDRO:	Hydrology and Water Quality
BIO:	Biologic Resources
HIS:	Historic and Cultural Resources
VIS:	Visual
POP:	Population, Employment, and Housing
SER:	Public Services
UTIL:	Public Utilities
NOI:	Noise
AIR:	Air Quality
PHS:	Public Health and Safety

Impacts are also categorized by type of impact as follows:

- S = Significant
- SU = Significant and Unavoidable
- LTS = Less than Significant
- PS = Potentially Significant

These notations are found following each impact and each mitigation measure to identify their significance before and after mitigation. The “potentially significant” (PS) impacts are those impacts that, following mitigation, would not be able to be guaranteed as less than significant.

The less-than-significant impacts are denoted by the letters “A”, “B”, etc. For example, a Land Use impact that was less than significant would be denoted as LU-A, followed by Conditions of Approval (vs. mitigation measures). The less-than-significant impacts are also denoted by both *italics and bolding*, whereas the significant impacts are denoted by **bolding** of the text and numbering (e.g., LU-1, LU-2, etc.).





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## A. LAND USE

■ ■ ■

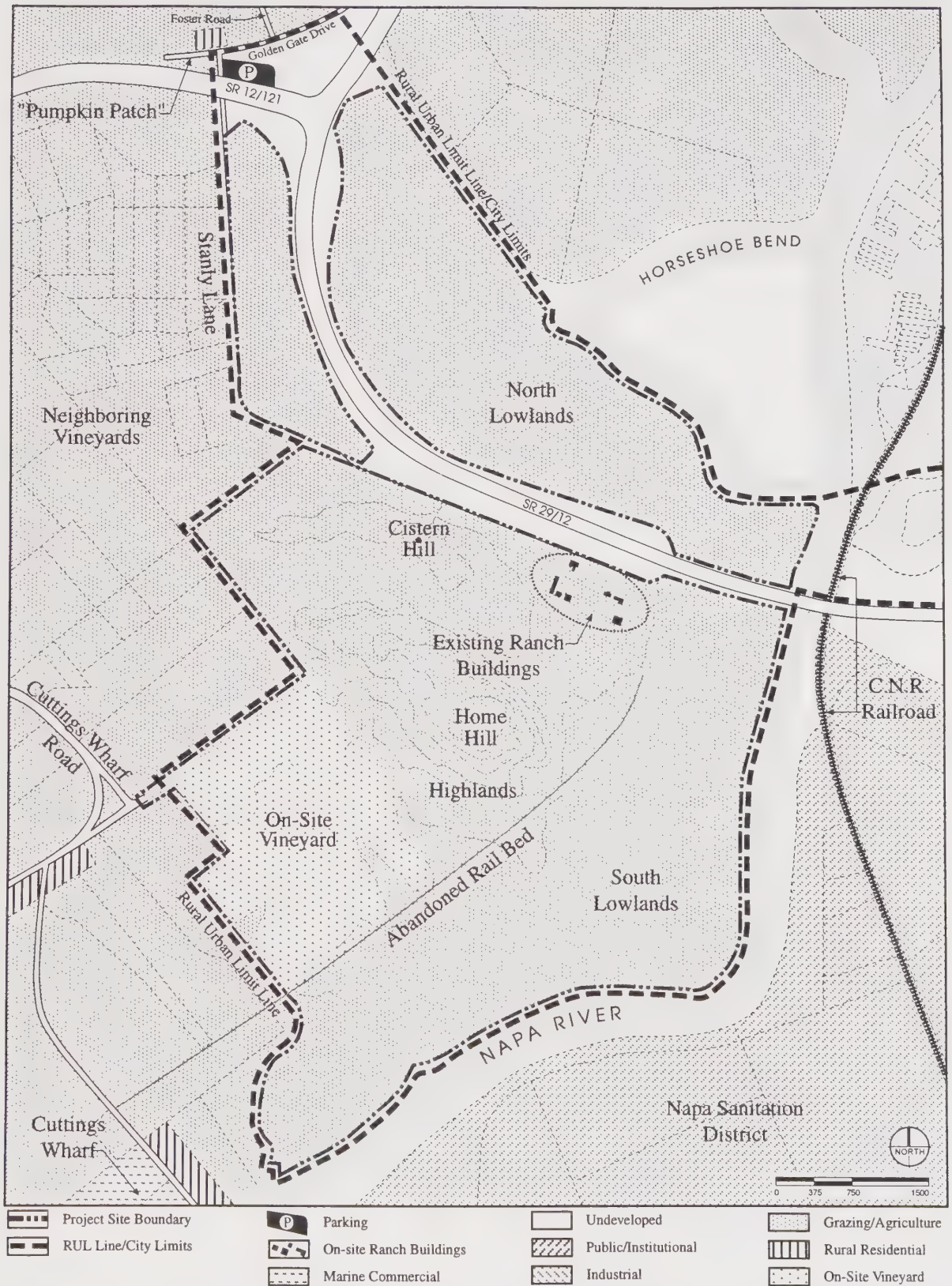
This section describes existing land uses at the project site and its nearby vicinity, and evaluates the compatibility of the proposed project's land uses with existing and planned land uses. The consistency of the project with local land use policies are addressed in Section IV.B, Public Policy, of this EIR.

<b>1. Setting</b>
-------------------

The *Draft Stanly Ranch Specific Plan (Draft SRSP)* encompasses an area of 918 acres at the southernmost end of the City of Napa and the Napa Valley. State Route (SR) 29/12 traverses the project site and divides the northern portion from the southern and western portions. The area north and east of SR 29/12 consists of about 210 acres; 656 acres are located in the area south of Stanly Lane. West of SR 29/12 and east of Stanly Lane is the panhandle area, 52 acres in size.

The *Draft SRSP* area is completely within the City's incorporated boundaries and the Rural Urban Limit (RUL) boundary (see Section IV.B, Public Policy). The project site was annexed to the City in the 1950s and 60s, and constitutes the largest piece of developable land remaining within the RUL. The *Draft SRSP* site is almost completely surrounded by adjacent, unincorporated (County) lands. A small band of incorporated land, just north of SR 29/12's crossing of the Napa River, connects the *Draft SRSP* area with other portions of the City of Napa (see Figure IV.A-1).

The project site is characterized by two distinct land forms: "Lowlands", which border the Napa River both north and south of SR 29/12 and comprise 425 acres (Etzel, 1997), and "Highlands" which form the remaining land area including the majority of the site's interior. Lowlands extend from the Napa River towards the site's interior and are mainly comprised of wetlands subject to the jurisdiction of the U.S. Army Corps of Engineers (COE) under Section 404 of the Clean Water Act. However, some upland acreage not subject to COE jurisdiction also exists within the Lowlands.



# STANLEY RANCH

## SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT

Figure IV.A-1  
Existing Land Uses on Project Site and in Vicinity of Site



a. Existing Land Use at the Project Site. Stanly Ranch has been utilized for agricultural production for more than 100 years. The land has primarily been in cattle and sheep grazing (its original name, "Rincon de los Carneros," is translated "Corner of the Shepherders"). As shown in Figure IV.A-1, the project site is primarily in low intensity agricultural use, including cattle grazing and limited viticulture (EDAW, 1997). Hay production on the property ceased several years ago. In the past, Stanly Ranch also supported a dairy operation, wine production and additional crops of pears, prunes, grains and potatoes. Remnant orchards exist in small pockets around the ranch, consisting of pear, fig and olive trees which were once part of the domestic farm yard.

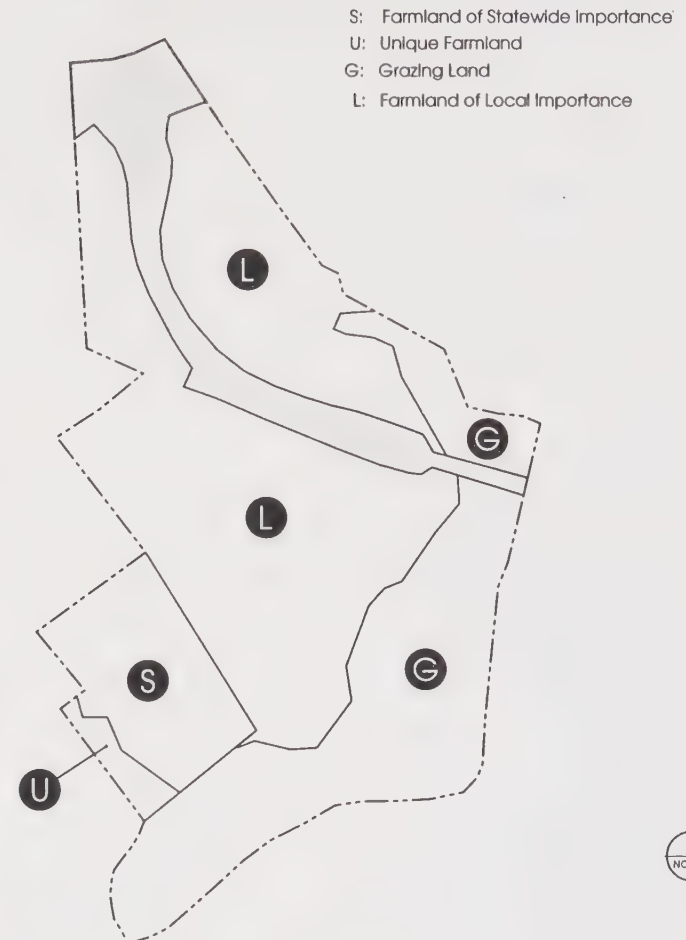
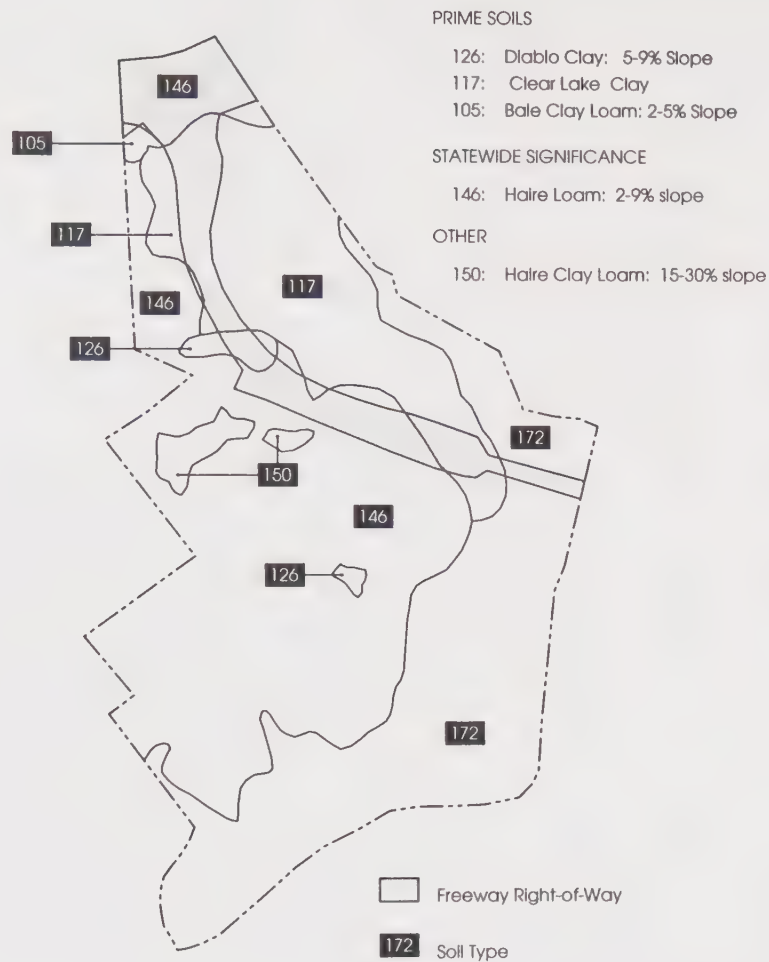
Table IV.A-1 summarizes the acreage of existing development by type of use. Of the 849 acres in agricultural use, 272 acres located in the North and South Lowlands are currently grazed. A 104-acre vineyard located south of Old Suscol Road and along the western edge of the property contains mature Pinot Noir vines planted over 20 years ago. One acre of the project site is in farm-related residential use. The remaining land area is in undeveloped open space or in roadways.

**Table IV.A-1**  
**EXISTING LAND USE**  
**WITHIN THE DRAFT SRSP AREA**

Use	Acres
Agriculture	849
Residential	1
Undeveloped/Other	68
<b>TOTAL</b>	<b>918</b>

(1) Classification of Existing Agricultural Lands. Two public agencies provide the primary classification systems for agricultural lands used in the assessment of environmental impacts pursuant to the California Environmental Quality Act (CEQA): the U.S. Department of Agriculture's Natural Resources Conservation Service (NRCS), formerly known as the Soil Conservation Service (SCS), and the California Department of Conservation.

The NRCS *Soil Survey of Napa County*, published in 1978, identifies the presence of the following soils series within the *Draft SRSP* area: Bale, Clear Lake, Diablo, Haire and Reyes. Of these types, Bale clay loam-2 to 5 percent slopes, Clear Lake clay-overwashed, and Diablo clay-5 to 9 percent slopes meet NRCS criteria for designation as "Prime" farmland, and Haire Loam-2 to 9 percent slopes meet NRCS criteria for "Statewide Important Farmlands." A total of 170 acres of "Prime" farmland soils as classified by the NRCS occurs primarily in the North Lowlands (140 acres) and in the panhandle (20 acres). A total of 415 acres of "Statewide Important Farmlands" in the form of Haire Loam with 2 to 9 percent slopes exist primarily in the uplands west and south of SR 29/12. The remainder is classified in lesser categories.



Source: U.S. Department of Agriculture, Natural Resources Conservation Service, California Department of Conservation and Brady/LSA, 1998.

# STANLY RANCH

SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT

Figure IV.A-2  
Farmland Categories

The California Department of Conservation manages the Farmland Mapping and Monitoring Program (FMMP). The FMMP overlay map for the Napa and Cuttings Wharf USGS quadrangles was published in 1996. The maps classify "Prime Farmland," "Farmland of Statewide Importance," "Farmland of Local Importance-Napa County," "Unique Farmland" and "Grazing Land," based on the NRCS Soil Survey and existing land use (see Figure IV.A-2).

The *Draft SRSP* area does not contain any lands classified by the Department of Conservation as "Prime Farmland". The FMMP classifies "Prime Farmland" as land which has the best combination of physical and chemical characteristics for production of crops and which has been used for the production of irrigated crops within a specified period of time prior to the mapping date. The FMMP map classifies an 104-acre area corresponding roughly with the existing vineyard south of Old Suscol Road as "Farmland of Statewide Importance". Farmland of Statewide Importance is similar to Prime Farmland but with minor shortcomings. These lands must have been used for the production of irrigated crops within a specified period of time prior to the mapping date. About 13 acres are classified as "Unique Farmland". This 13-acre area is located immediately adjacent to the area classified as Farmlands of Statewide Importance. The "Unique" classification is applied to lands with lesser quality soils used for the production of specific high economic value crops. All of the South Lowlands and the southern portion of the North Lowlands, 272 acres, are classified as "Grazing Land". The remainder of the *Draft SRSP* area, or 529 acres, is classified "Farmland of Local Importance". Areas with this designation consist of land determined to be of importance to the local economy by the county and local advisory committees. This classification can include uncultivated land areas with soils qualifying as Prime Farmland, Farmland of Statewide Importance, or Farmland of Local Importance.

(2) Existing On-Site Structures. Existing structures within the project site are limited to ten, small farm-related buildings, of which eight are located in a small cluster in the central portion of the property, south of SR 29/12 and at the end of Stanly Lane (Hill, 1997). Existing structures consist of:

1. Vineyard manager's house (also known historically as the Stanly House);
2. Vineyard manager's garage;
3. One single-family house occupied by ranch workers (referred to in the Cultural Resources section of Chapter IV as the Foreman's House);
4. One multi-unit house occupied by ranch workers;

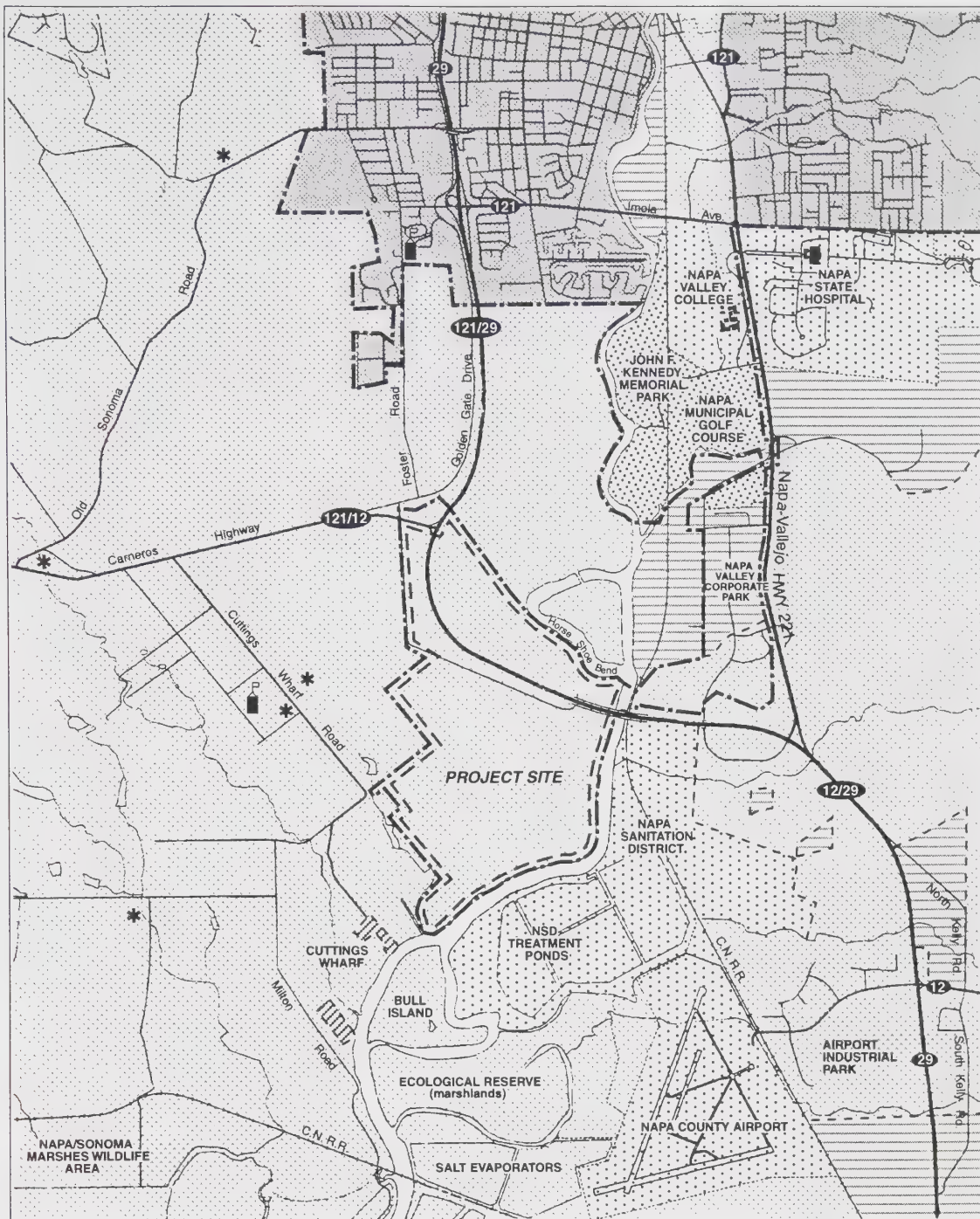


5. The carriage house (adjacent to the Stanly Ranch office) which was formerly used for the storage of carriages and horse-related equipment;
6. Equipment/tool shed used for farm vehicles;
7. Former fruit dryer building that has been remodeled for use as the Stanly Ranch office;
8. Hay barn and associated metal silos which are currently in use;
9. Water cistern at Cistern Hill (not currently in use); and the
10. Pump house at Cistern Hill (abandoned).

(3) Existing Roads. Existing roads within the project site include one paved, two-lane public road, (Stanly Lane); one named, unpaved, private road (Old Suscol Road); and a number of unnamed, unimproved private roads. Stanly Ranch is located south of SR 12/121. State Route 29/121 bisects the site but provides no direct access to the property. Nearby local roadways include Cuttings Wharf Road west of the project site, Golden Gate Drive north of the Stanly Lane and SR 12/121 intersection, and Foster Road.

b. Land Use in the Project Vicinity. Land uses in the immediate vicinity of the site are shown in Figure IV.A-1; land uses within a radius of about 1.5 miles surrounding the *Draft SRSP* area are shown in Figure IV.A-3. The site is within the Carneros area, an area that borders the San Francisco Bay and that extends west from the project site into Sonoma County. Historically, this area has been in agricultural use, supporting cattle grazing, orchards, and more recently, vineyards for the production of a variety of wine grapes.

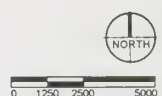
The *Draft SRSP* area, while within the City of Napa's corporate limits, is largely separated from developed portions of the City of Napa. Downtown Napa is about three miles north of the project site. The City's corporate limits extend to the south along a corridor bound generally by the Napa River on the west and the Napa-Vallejo Highway on the east crossing the Napa River just north of SR 12/29 to encompass the Stanly Ranch. Unincorporated county lands surround the remainder of the project site except for two small adjacent parcels in the City immediately north of SR 12/121.



**Note:**

Areas smaller than 20 acres are not shown as distinct uses due to the large area covered by this figure. For example, scattered rural residential uses exist west of project site.

Napa City Limits	Agriculture/Open Space	Industrial
Project Boundary	Public/Institutional	Residential
Elementary School	Marine Commercial	Park
Commercial Winery		



Source: This figure prepared by Brady/LSA based on aerial photo provided by the City of Napa 1990, and is intended to provide a general characterization of surrounding land uses.

# **STANLY RANCH** **SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT**

**Figure IV.A-3**  
**Major Land Uses Within 1.5 Miles of Project Site**

Surrounding land uses shown in Figures IV.A-1 and IV.A-3 are described as follows:

- *Areas to the North.* Agricultural uses, including vineyards, exist adjacent to the Stanly Ranch in unincorporated areas northwest of the project site. SR 12/121 intersects with SR 29/12 at the northern edge of the project site.

Immediately north of the intersection of SR 12/121 with Stanly Lane and south of Golden Gate Drive is an undeveloped area containing a Caltrans park-and-ride lot. To the west of the park-and-ride lot, an agricultural parcel colloquially known as the “pumpkin patch” has historically been used for periodic and/or seasonal, low intensity commercial uses such as pumpkin or Christmas tree sales. Rural residential uses exist north of Golden Gate Drive east of Foster Road. A small City-owned future park site lies just north of the park-and-ride lot. This property and an adjacent private parcel south of Golden Gate Drive are within City limits.

Low-lying, floodway/flood plain areas in low intensity agricultural use separate the project site from City lands to the north and northeast.

Incorporated lands north of the project site include residential development in the vicinity of Foster Road (about three-quarters of a mile north of the project site) and in areas south of Imola Avenue east of SR 121/29 (about 1.5 miles north of the project site). John F. Kennedy Memorial Park, the Napa Municipal Golf Course, the Napa Valley Memorial Park Cemetery, and a portion of the Napa Valley College campus are located within 1.5 miles northeast of the project site.

- *Areas to the East.* The Napa River and Horseshoe Bend form much of the *Draft SRSP* area’s eastern border. An adjacent island between the river and Horseshoe Bend is undeveloped. The California Northern Railroad extends north/south east of the river (see Figure IV.A-1). The City’s Napa Valley Corporate Park borders the site to the east (just north of SR 29) and extends north generally between the Napa River and the Napa-Vallejo Highway (SR 221). The partially developed 246-acre Corporate Park contains office, manufacturing, limited retail and warehousing uses including Apple Computer, Robert Mondavi Winery Corporate Headquarters, Dey Labs, and United Parcel Service (UPS) (Napa County, 1997). To the west of the Corporate Park is the 100+ acre Napa Pipe Corporation Plant.
- *Areas to the South.* The Napa River forms the site’s southern/southeastern boundary, separating the site from the Napa Sanitation District’s (NSD) Suscol Wastewater Treatment facility and ponds. The Napa County Airport, a general aviation facility, is located southeast of NSD lands, about 4,000 feet from the southern edge of the *Draft SRSP* area. The California Northern Railroad forms the airport’s eastern boundary. Lands east/northeast of the airport are currently primarily vacant or in agricultural use; however, they are



part of the County's Airport Industrial Park and are planned for commercial and industrial uses. Scattered manufacturing and warehousing uses exist in this area along SR 29, and in proximity to Kelly Road.

Marshlands of the Napa River lie to the west of the airport. Salt evaporation ponds in the vicinity of Green Island Road are also located west of the airport and east of the Napa River.

- *Areas to the West.* Unincorporated areas, primarily in agricultural vineyard use, occur immediately west of the project site. At least two wineries, the Carneros Alambic Distillery and Bouchaine Vineyards, are within 1.5 miles of the *Draft SRSP* area. Limited rural residential development also exists west of the project site, primarily in the vicinity of Cuttings Wharf Road. Cuttings Wharf, at the terminus of Cuttings Wharf Road, is located southwest of the project site opposite Bull Island. It includes a public boat launch and marine-related commercial uses associated with the Napa River. Further west, the Napa Valley Marina is off Milton Road.

c. Easements, Deed Restrictions and Constraints to Development.

(1) Utility Easements. Utility easements that traverse the site are shown in Figure III-3, Site Features. These include the following:

- Pacific Gas and Electric (PG&E) 75-foot Tower Line Easement;
- PG&E 20-foot Gas Pipeline Easement (in proximity to Stanly Lane);
- PG&E 15-foot Gas Pipeline Easement (across southern portion of site);
- PG&E Pole Line Easement along Stanly Lane;
- City of Napa 20-foot Water Line Easement; and
- Caltrans 10-foot Underground Utility Easement.

(2) Wetlands. Wetland areas subject to the jurisdiction of the U.S. Army Corps of Engineers (COE) under Section 404 of the Clean Water Act are primarily located in the Lowlands adjacent to the Napa River both north and south of the SR 29/12 bridge. These areas are fully described and mapped in Section IV.F, Biology.

(3) Flood Plain. Lands within the 100-year flood plain, which includes most of the Lowlands and some Highlands, are described and mapped in Section IV.E, Hydrology. A portion of the North Lowlands is also designated "floodway" (land area needed to convey flood flows).

(4) Sanitary Sewer Service. The project proposes to connect to the NSD for sanitary sewer service. However, the NSD service area does not presently include the *Draft SRSP* area. A sphere of influence adjustment and annexation of the property to NSD, as well as an assessment of NSD capacity to serve the project, would be required before sewer service could be provided. The relationship of the project to the policies of the Napa County Local Agency Formation Commission (LAFCO) regarding annexation to the NSD are discussed in Section IV.B, Public Policy. Alternatively, the project proposes to develop an on-site wastewater treatment facility. The potential need to establish a Community Services District for an on-site wastewater plant is addressed in Chapter V, Alternatives.

(5) Airport Land Use Compatibility Zones. The *Draft SRSP* area includes lands that are within adopted Airport Land Use Compatibility Zones established by the Napa County Airport Land Use Commission (ALUC) that restrict the type and intensity of development. The project's relationship to the policies set forth in the Airport Land Use Compatibility Plan, including the consistency of proposed development with the requirements of applicable compatibility zones, is assessed in Section IV.B, Public Policy.

(6) Highway Noise Contour Areas. The project site includes lands affected by high noise levels of SR 12/121. The project's relationship to these noise contour areas is assessed in Section IV.L.

## **2. Impacts and Mitigation Measures**

a. Overview. This land use impact section of the EIR focuses on the compatibility of existing and proposed land uses with surrounding land uses, particularly agricultural uses and the Napa County Airport. Additionally, it considers the internal compatibility of proposed uses. It concludes that the project does not result in significant impacts on established communities, significant internal land use conflicts or conversion of prime agricultural land. Significant impacts addressed include potential agricultural/residential conflicts at the urban-rural interface and airport land use compatibility impacts. With mitigation measures, these impacts are reduced to "less-than-significant".

Secondary land use impacts that may occur related to traffic, noise, or other impact areas are assessed in the appropriate technical sections of this EIR. The project's consistency with public policy, including general plan and zoning designations, is addressed in Section IV.B.

b. Criteria of Significance. For the purposes of this EIR and according to the policies of the City of Napa and *Appendix G of the State CEQA Guidelines (Guidelines)*, the proposed project would result in significant land-use related impacts on the environment if the proposed uses would:

- Disrupt or divide the physical arrangement of an established community;
- Introduce new land uses that would conflict with established uses within or adjacent to the *Draft SRSP* area;
- Allow internally incompatible land uses within the *Draft SRSP* area; or
- Convert prime agricultural land to non-agricultural use or impair the agricultural productivity of prime agricultural land.<sup>1</sup>

Impacts are discussed for each of these criteria.

c. Less-Than-Significant Land Use Impacts.

(1) Divide an Established Community. Because the *Draft SRSP* area is largely undeveloped and is adjacent to agricultural lands to the west and north, the river and low lying agricultural, vacant and industrial lands to the east, and the river and public-serving uses to the south, the project would not divide the physical arrangement of an established community. However, implementation of the *Draft SRSP* would result in the urbanization of an area that has historically been in agricultural use and that has been associated with the rural character of the Carneros District. The site is at the eastern edge of the Carneros area. Impacts of the site's land uses on adjacent agricultural land uses are described in Impact LU-1 on pages IV.A-13 to IV.A-15.

(2) Internally Incompatible Uses. The *Draft SRSP* would not allow internally incompatible land uses. Tourist-related commercial uses and activities are located away from residential neighborhoods. Developed areas are generally removed from the designated flood plain, floodway and utility easements. Development under the *Draft SRSP* would comply with restrictions imposed by Caltrans, PG&E, and the City of Napa Water Department for development proposed within respective utility easements crossing the Stanly Ranch. Residential areas are located away from unacceptably high freeway noise areas. The Hydrology and Biological Resources sections of this EIR identify direct and indirect impacts to

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<sup>1</sup> For the purposes of this EIR, the determination of conversion of "Prime" agricultural land will be as classified by the California Department of Conservation Farmland Mapping and Monitoring Program (FMMP). The FMMP map is based on a combination of the NRCS soil classifications and existing land use. Lands classified as "Prime Farmland" by the NRCS are based solely on soil type and would not typically be classified as "Prime Farmland" by the Department of Conservation unless the land was also irrigated and in active agricultural production.



wetlands, impacts on habitat due to proximity of development and trail construction, and placement of fill within the flood plain. Mitigation measures identified in this EIR would reduce these impacts to less-than-significant levels.

***Impact LU-A: Both the Bay Trail and proposed River Trail have the potential to result in limited land use conflicts such as littering, noise, trespass or other nuisances. (LTS)***

While these are not considered significant internal land use impacts, agencies responsible for trails work to minimize potential conflicts through design and operation measures. Design and operation measures which are recommended to be included as conditions of approval in the final trail/parking lot design stage to assure that the potential for conflicts are minimized are discussed below.

Condition of Approval LU-A: The applicant shall work with the City Community Resources and Police Departments at the final trail design stage to develop trail designs and management regulations for Stanly Ranch that seek to minimize potential land use conflicts. It is expected that such measures would include:

- Provision of screening between Neighborhood 4 homes and the future River Trail Southerly Loop.
- Compliance with golf course industry standards for pedestrian safety through necessary means, including fencing or other barriers and/or design changes where trails are in proximity to the golf course and where trail users could be injured by golf balls. To minimize the height of fencing, trails may be designed at a lower elevation than surrounding terrain (i.e., depressed within the terrain) or curved fencing could partially cover the trail alignment.
- Provision of barriers to prevent unauthorized motor vehicle use.
- Provision of signs describing rules of operation (i.e., time of use, trail etiquette) at the public access parking area and other appropriate locations.
- The project shall include provision of adequate maintenance and police and/or private security resources. (LTS)

Note: An evaluation of two alternative river trail alignments is found in Appendix D. These trails were evaluated during preparation of the EIR, but were found to have more substantial environmental impacts or design impacts on the project than the proposed Project River Trail.

(3) Conversion of "Prime" Agricultural Land and On-Site Agricultural Uses. Implementation of the *Draft SRSP* would permanently remove opportunities for agricultural production of about 104 acres classified by the Department of Conservation's Farmland Mapping and Monitoring Program as "Farmlands of Statewide Importance" and 13 acres of "Unique Farmland". These lands are found in the western portion of the site in the location of the existing site vineyard. Additionally, an estimated 529 acres of "Farmlands of Local Importance - Napa County" would be removed from the agricultural land base of the City and County of Napa. These lands constitute the remainder of the Highlands and northern part of the North Lowlands. (It should be noted that at least two-thirds of the area designated as "locally important" would be either retained as open space or planted as vineyards for the on-site winery.) However, because the development of the *Draft SRSP* would not affect any lands designated by the FMMP as "Prime Farmland," the eventual conversion of agricultural lands and loss of their productive capacity would be considered a less-than-significant impact under CEQA.

Development under the *Draft SRSP* area would also permanently remove the future viability of grazing in most undeveloped portions of the site, especially considering possible noise and odor complaints if cattle were grazed around new residences. Although some areas suitable for cattle grazing (North and South Lowlands) would be retained as open space under the *Draft SRSP*, continued grazing would not be viable in the South Lowlands given the proximity of residential development and the reduced area available for grazing. While the North Lowlands might be viable for continued grazing, the owners of Stanly Ranch have committed to removing grazing from the Lowlands (most of which are wetlands) in the event the City of Napa adopts the *Draft SRSP* (Kambe, 1997).

The *Draft SRSP* proposes the development of approximately 12 acres of vineyards associated with the proposed winery in the panhandle area east of Stanly Lane and west of SR 29/12, and in a small portion of the area east of the freeway. These uses should be compatible with neighboring vineyards and wineries west of the *Draft SRSP* area.

(4) Off-Site Improvements. The *Draft SRSP* proposes construction of a fire station to serve the project either on City-owned lands located immediately north of the intersection of Stanly Lane with SR 12/121 (Figures III-21) or on the project site (Figure III-20).

Development of a fire station at the off-site location would result in the loss of approximately 0.5 acres of land area on a 2.6-acre site which might otherwise be used for the development of new park, rest stop or public parking facilities. This impact is not considered a significant impact, given the security benefits of the combined facility.

d. Significant Land Use Impacts.

**Impact LU-1: Adoption of the *Draft SRSP* would change the site's land uses by concentrating residential and resort-related commercial uses in an area used primarily for grazing, viticulture and open space. Land use conflicts could arise between residential or resort uses developed under the *Draft SRSP* and agricultural uses at the urban-rural interface. (S)**

The *Draft SRSP* would allow for development of a golf course resort and residential project on up to 493 acres of the 918-acre area and would permanently remove grazing from the North and South Lowlands. Land currently in grape production, grazing or other agricultural use would be displaced.

Lands adjacent to and west of the *Draft SRSP* and RUL are generally in various agricultural uses, primarily vineyards. Limited rural residential uses also occur in the area and are often associated with agricultural production. The *Draft SRSP* would allow development of resort commercial and residential uses to extend to the RUL along the western and southwestern edge of the *Draft SRSP* area.

Undeveloped Lowland areas adjacent to agricultural lands on the east and southwest would create no land use conflicts. The winery and associated vineyards proposed for the panhandle area at the north end of the site would be similar to existing wineries, vineyards and agricultural uses located adjacent to this area and common to the region and would not result in land-use impacts. The small commercial wine center proposed adjacent to the winery is also not unlike scattered commercial areas in existence in Napa County, should complement the winery and not result in incompatible land use impacts.

However, off-site agricultural activities in proximity to proposed on-site residences could create conflicts related to dust, odors and noise. This would be especially true for proposed Neighborhoods 4 and 5. Similar effects could occur with the resort units. Additionally, proposed project trails may also result in concerns about nuisance impacts to agricultural areas. By itself this would not be considered a significant effect; it is considered significant only in combination with the project as a whole due to effects on adjacent agricultural land uses.

This land use impact would be partially mitigated by *Draft SRSP* land use plans and policies that limit impacts associated with changes in land use; however, additional measures would be required to further reduce this impact to a level of less than significance.

The following *Draft SRSP* land use policies would reduce potential land use compatibility conflicts with adjoining uses at the urban-rural fringe:



- (a) Policy 1.1: Preserve the Stanly Ranch Lowlands as open space.
- (b) Policy 1.4: Encourage on-site open spaces along the RUL line to provide a transition between the residential and resort activities and the open space and agricultural uses.
- (c) Policy 1.5: Provide for an 80-foot agricultural setback along the western side of the site.

Consistent with City of Napa policies, the *Draft SRSP* would also limit development intensities within one quarter mile of the RUL line by reducing proposed residential densities in Neighborhoods 4 and 5, in comparison to other on-site neighborhoods, and by clustering the smaller resort cottages directly around the resort and locating only the larger resort homes in the resort complex next to the RUL.

Mitigation Measure LU-1: The following measures shall be implemented to reduce the potential for land use conflicts with adjacent agricultural uses:

- The Specific Plan (SP) zoning regulations shall be amended to incorporate and apply provisions of Chapter 17.60.090A to all residential and resort unit properties adjacent to or within 300 feet of the RUL line. These provisions include:
  1. A minimum 80-foot setback of any dwellings or structures designed for human habitation from the RUL line. This setback shall include a minimum 15-foot landscaped buffer designed to provide a clear boundary between urban and agricultural uses.
  2. Sound/noise reducing design and construction techniques shall be required at the tentative map or use permit stage, whichever is applicable, to reduce noise levels to occupants from adjoining farm operations to acceptable interior levels as defined in the Noise section of this EIR.
  3. A recorded notice to run with the land that these properties may be subject to agricultural impacts (such as the dust, noise, agricultural chemicals and odors associated with operation of nearby farms or vineyards), and that the nearby farmer/grower/rancher has the "right-to-farm" and the property owner may not sue to prevent such activities normally associated with agricultural activities. This notification shall include positive assurance that a prospective buyer has received this information.

- The SP zoning shall require attractive landscaping and fencing between the Bay Trail and adjacent lands beyond the RUL line, provision of barriers to prevent unauthorized motor vehicle use, and signs describing rules of operation at appropriate locations. (LTS)

**Impact LU-2: Implementation of the project could result in airport-related land use compatibility impacts in the form of increased noise and overflight annoyance complaints. (S)**

The consistency of the proposed project with the adopted Napa County Airport Land Use Commission *Airport Land Use Compatibility Plan* is assessed in Section IV.B, Public Policy. The intent of the *Airport Land Use Compatibility Plan*, when it was adopted in 1991, was to permit development on the Stanly Ranch, but to use site design and overflight easements to obtain an acceptable level of compatibility (Shutt Moen, 1997). Approval of the proposed project would require a consistency determination by the Napa County Airport Land Use Commission. The Council may approve the project, despite an adverse consistency determination from the Commission, with a two-thirds vote. The *Airport Land Use Compatibility Plan* identifies four land use compatibility concerns: safety on the ground, hazards to aircraft flight, noise and overflight annoyance.

(1) Safety on the Ground. The aviation compatibility analysis prepared by Shutt Moen Associates for this project (presented in Appendix I of this EIR) concludes that safety to those on the project site would be only a minor concern based on accident location data developed by the UC Berkeley Institute for Transportation. These data, which were prepared for Caltrans' *Airport Land Use Planning Handbook* published in 1993, included an examination of over 400 accidents at airports throughout the United States. As shown in Figures 2 and 3 of Appendix I, there were very few accidents lateral to the runway. The areas proposed for development by the *Draft SRSP* are more than 5,000 feet north or west of existing runways and approach zones. Figure 1 of Appendix I shows the relationship of the Stanly Ranch to the Napa County Airport runways and approach zones.

(2) Hazards to Aircraft Flight. Hazards to aircraft flight fall into two main categories: 1) physical obstructions within navigable airspace; and 2) specific land use types and activities that can affect flight safety such as distracting lights, sources of glare or smoke, land uses that produce electronic interference that can interfere with aircraft instruments or communications, and land uses that attract large flocks of birds. The *Airport Land Use Compatibility Plan* establishes land use compatibility zones that restrict the height of structures and the type and intensity of development and activities in areas surrounding the Napa County Airport. Section IV.B of this EIR, Public Policy, assesses the proposed project's consistency with the

adopted *Airport Land Use Compatibility Plan*. With implementation of the mitigation measures identified in Section IV.B, the proposed project would be consistent with the *Airport Land Use Compatibility Plan* and the potential for the introduction of hazards to flight as a result of the project would be less than significant.

(3) Noise. Aircraft-related noise impacts on the proposed development are addressed in detail in Section IV.L of this EIR, Noise. As shown in Figure 1 of Appendix I, the Community Noise Equivalent Level (CNEL) contours for the Napa County Airport, which are a cumulative noise metric, do not encompass the project site. Thus, the cumulative noise levels on the site from aircraft noise are within acceptable ranges for residential development; this is further described in Section IV.L. However, portions of the project site are within ALUC land use compatibility zones D, E, and F (see Figure IV.B-5). As described in Section IV.B, the *Airport Land Use Compatibility Plan* restricts the type and intensity of development in these areas accordingly.

(4) Overflight Annoyance. Consistency with the *Airport Land Use Compatibility Plan* does not mean that aircraft-related noise and overflight annoyance would not result in complaints by residents of the proposed project. As stated in the aviation compatibility analysis in Appendix I, noise complaints have come in the past from residences in the Milton Road area of Napa, which is located southwest of the Stanly Ranch.

The use of easements and disclosure statements reduces the probability of noise complaints from future property owners but is unlikely to prevent all noise complaints. These measures reduce the likelihood that individuals highly sensitive to aircraft noise will acquire a residence near an airport. However, aircraft noise that did not seem intrusive at the time a property was acquired can become a significant source of annoyance over time. If aircraft operations increase or there is an increase in the number of louder aircraft, residents may complain even if they were informed at the time of purchase that this could occur. Many people are inaccurate predictors of their sensitivity to aircraft noise.

While the principal purpose of aviation easements is to alert potential purchasers that a property is likely to be exposed to aircraft overflights, easements also confer certain rights to the airport. The various enumerated rights (e.g., right of overflight) enable normal aircraft operations to occur in the vicinity of the airport. The use of easements reduces the liability, if any, that may result from aircraft operations.

Mitigation Measure LU-2: Implementation of the mitigation measures identified in the Public Policy section of the EIR related to easements and disclosure statements for on-site property owners shall be implemented to reduce potential airport-related land use incompatibilities, including noise and overflight annoyance. (LTS)





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## B. PUBLIC POLICY

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Adoption of the *Draft SRSP* would establish new land use and zoning designations in the Specific Plan area. This section evaluates the consistency of the proposed policies, land use designations and intent of the *Draft SRSP* with applicable environmental goals and policies of the City and other applicable land use planning and regulatory policies. Specifically, this section addresses the project's relationships with the following:

- Adopted *City of Napa General Plan*
- *Draft City of Napa General Plan* in the event it is adopted prior to the *Draft SRSP*
- Zoning regulations of the City
- Congestion Management Agency (CMA) policies
- Napa County Local Agency Formation Commission (LAFCO) policies
- *Airport Land Use Compatibility Plan*

The *City of Napa General Plan* consistency analysis provided in this section examines the consistency of the *Draft SRSP* with both the adopted *City of Napa General Plan* (City of Napa, 1986 (hereinafter referred to as the *General Plan*) and the *Draft General Plan* (City of Napa, 1996) (hereinafter referred to as the *Draft General Plan* or *Draft Policy Document*) land use policies and identifies inconsistent policies relating to topical areas other than land use. Consistent policies relating to topical areas (such as transportation, public services, noise) are included in the respective topical sections of Chapter IV of this EIR.

1. <b>Setting</b>
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a.     City of Napa General Plan. The *City of Napa General Plan* was adopted in 1983 and updated/reprinted in 1986. In 1991, the City of Napa began its most recent *General Plan* update process which has produced a series of planning documents. The primary volume, which sets forth draft land use policies, is the *Draft Policy Document* completed in August of 1996. This update had not been adopted as of the time this EIR was prepared, although the Planning Commission had reviewed and recommended some changes to it.

This EIR examines the adopted *General Plan* because, pursuant to the California Environmental Quality Act (CEQA), a potentially significant impact may be deemed to occur if a project or plan under review conflicts with the *adopted* environmental plans, and goals of the community where it is located. The project's consistency with the *Draft General Plan* is also evaluated because it reflects proposed plans, policies and goals for the City which may be adopted prior to the *Draft SRSP*.

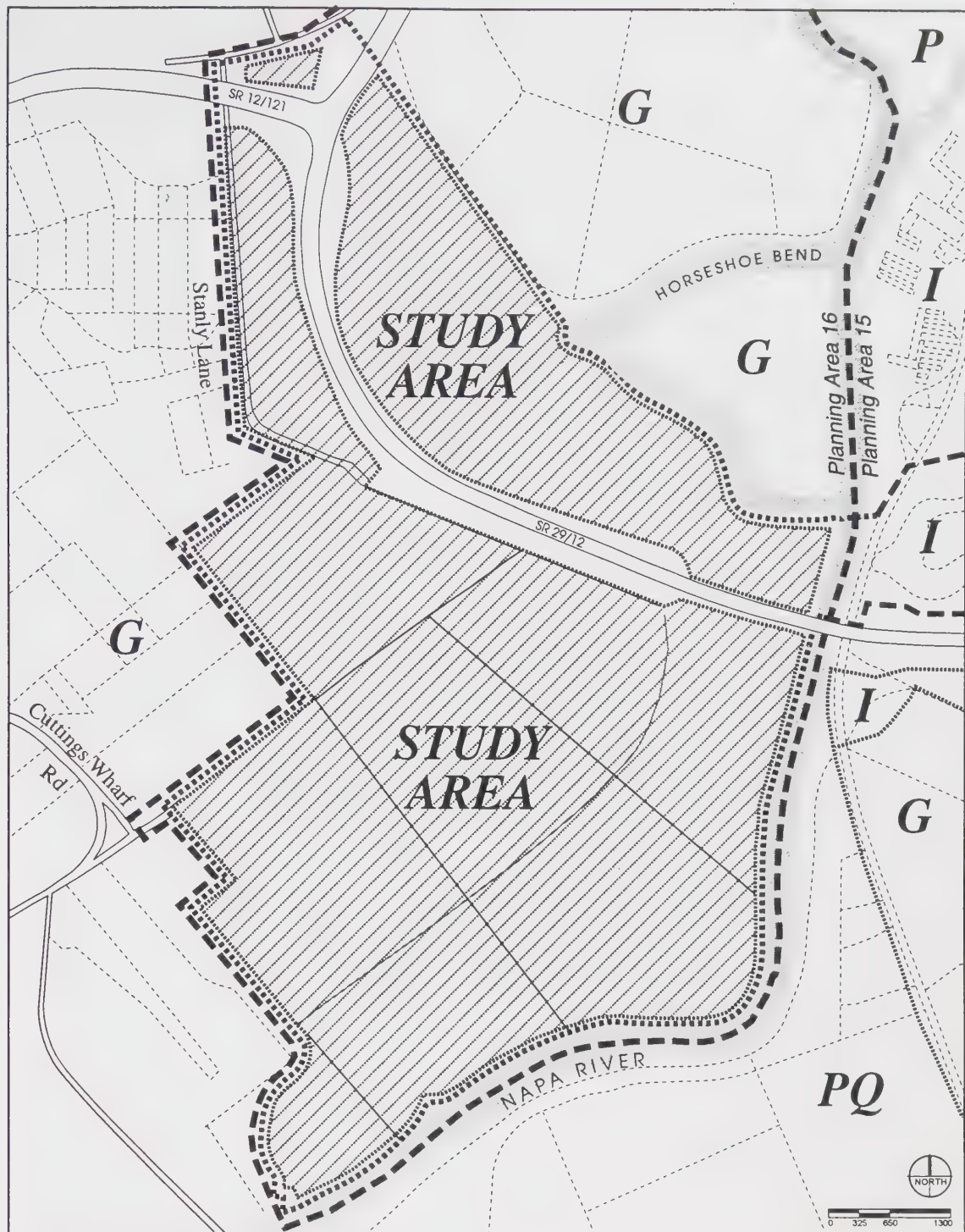
(1) Adopted (1983) City General Plan. The adopted *General Plan* designates the entirety of the project site as "Study Area" (see Figure IV.B-1). The *General Plan* describes the Study Area designation as indicative of "lands which require further evaluation of land use alternatives and development constraints, service availability, etc. before a General Plan land use designation can be made. Any proposed use shall require a General Plan amendment and environmental review prior to designating permitted land uses and development standards" (City of Napa, 1986).

Unincorporated (County) lands adjacent to the Stanly Ranch to the west, north and the northeast to the Napa River are designated in the City's *General Plan* as "Greenbelt" (see Figure IV.B-1). The *General Plan* states that the City's Greenbelt designation shown for County lands is intended to "fortify the City's intention that these adjacent County lands not be urbanized" (City of Napa, 1986). Greenbelt lands are to remain in agricultural or very low density rural residential, public or institutional use, according to the City's *General Plan*.

Unincorporated lands southeast of the Stanly Ranch are designated in the City's *General Plan* as "Public/Quasi-Public", "Greenbelt" and "Industrial". The Public/Quasi-Public designation corresponds with the Napa Sanitation District lands immediately southeast of the project site, across the Napa River. The industrially-designated areas correspond with lands east of the Napa River adjacent to the City's Napa Valley Corporate Park, and County Airport Specific Plan lands. City Corporate Park lands adjacent to the Stanly Ranch (north of the SR 29/12 "southern crossing" of the Napa River) are also designated "Industrial."

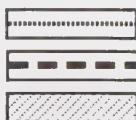
The Land Use Element of the *General Plan* defines 16 Planning Areas: units for which the *General Plan* describes neighborhood characteristics, circulation, land use issues and areas of past and projected growth. The *Draft SRSP* area is within Planning Area 16 - River West. The River West Planning Area includes developed lands north of the Stanly Ranch, to approximately Imola Avenue. The description of the River West Planning Area includes the following general site description of the Stanly Ranch:





#### LAND USE DESIGNATION STUDY AREA

G Greenbelt  
I Industrial  
PQ Public/Quasi-Public  
P Park



Land Use Boundary  
Planning Area Boundary  
Study Area Boundary



RUL Line/City of  
Napa Corporate Limit

Source: EDAW, 1997

## STANLEY RANCH

### SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT

Figure IV.B-1  
Adopted General Plan Land Use Designations (1983)

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*The Stanly Ranch lies south of the City core, straddling the southern crossing on the north and south. It is included within the Rural Urban Limit (RUL) as an appropriate site for urban development. Since it is located outside the LAFCO Sphere of Influence (SOI) and Napa Sanitation District boundary, these boundaries must be adjusted prior to development. The site is in agricultural use...and is surrounded by agricultural lands. Public service facilities (sewer service, transit, police, fire, etc.) do not extend to the site. Sewer lines would have to cross the Napa River to connect to the sewage treatment plant. Before development occurs, fire service would have to be upgraded by either construction of a new station or arrangements to share the Napa State Hospital facilities. Approximately half of the site is within the floodway and nearly all within the floodway fringe. In addition, much of the site is covered by marsh. The General Plan designates the site as a Study Area, for further evaluation prior to a commitment to any specific land use (City of Napa, 1986).*

Since 1986, detailed studies of the site have been completed which modify some of the description above. The latest 1997 flood hazard maps provided by the Federal Emergency Management Agency (FEMA) show that the floodway is limited to the eastern portion of the North Lowlands (east of SR 29/12). The 100- and 500-year flood plains are limited to the remainder of the North Lowlands, the South Lowlands, and immediately adjacent lands. Similarly, the marshlands described above are contained within the North and South Lowlands which encompass less than one-half of the Stanly Ranch.

It should also be clarified that LAFCO approval must be sought to expand Napa Sanitation District's SOI (service area) in order for that agency to annex Stanly Ranch. The City does not face the same constraint regarding the LAFCO SOI, as the area has been annexed to the City since 1964. Also, City fire and police do provide service to this area, as to all City areas.

(2) Draft General Plan. The 1996 *Draft General Plan Policy Document*<sup>1</sup> including new Addenda dated December, 1997 and also dated April 24, 1998 in the *RDEIR Response to Comments* document, state that prior to any development in the Stanly Ranch Planning Area (Planning Area No. 12, according to the *Draft Policy Document's* new numbering system), a Specific Plan is required.

The *Draft Policy Document* had proposed residential, commercial and "public-serving" uses in the Stanly Ranch Planning Area. These land uses were to serve as a basis for analysis in the General Plan EIR. The 1996 *Draft General Plan Policy*

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<sup>1</sup> The *Draft Policy Document* refers to a portion of the *Draft General Plan* that includes goals and policies while the *Draft General Plan* refers to the entire document.

*Document* land use designations for the project site are shown in Figure IV.B-2. and are described below:

- TC – Tourist Commercial lands are designated east and south of Stanly Lane (TC-551 and TC-552);
- SFR – Single-Family Residential lands are designated at the western edge of the Stanly Ranch and south of Stanly Lane adjacent to the Tourist Commercial lands (SFR-210);
- SFI – Single-Family Infill lands are designated south of Stanly Lane in the site's interior (SFI-211); and
- PS – Public Serving uses are designated throughout the Lowlands both north and south of SR 29/12 (PS-920 and PS-921).

A small City area north of the intersection of SR 29/12 with SR 12/121 is designated in the *Draft Policy Document* as TC - Tourist Commercial (TC-550). This area is not included within the *Draft SRSP*, but is part of Planning Area No. 12.

The numbers that follow the land use designations identified above correspond to geographic units, or "pods", that define density and intensity of future development based on the character of the surrounding neighborhood. A description of these land use designations and corresponding density ranges defined for each pod defined in the *Draft SRSP* area, is provided below.

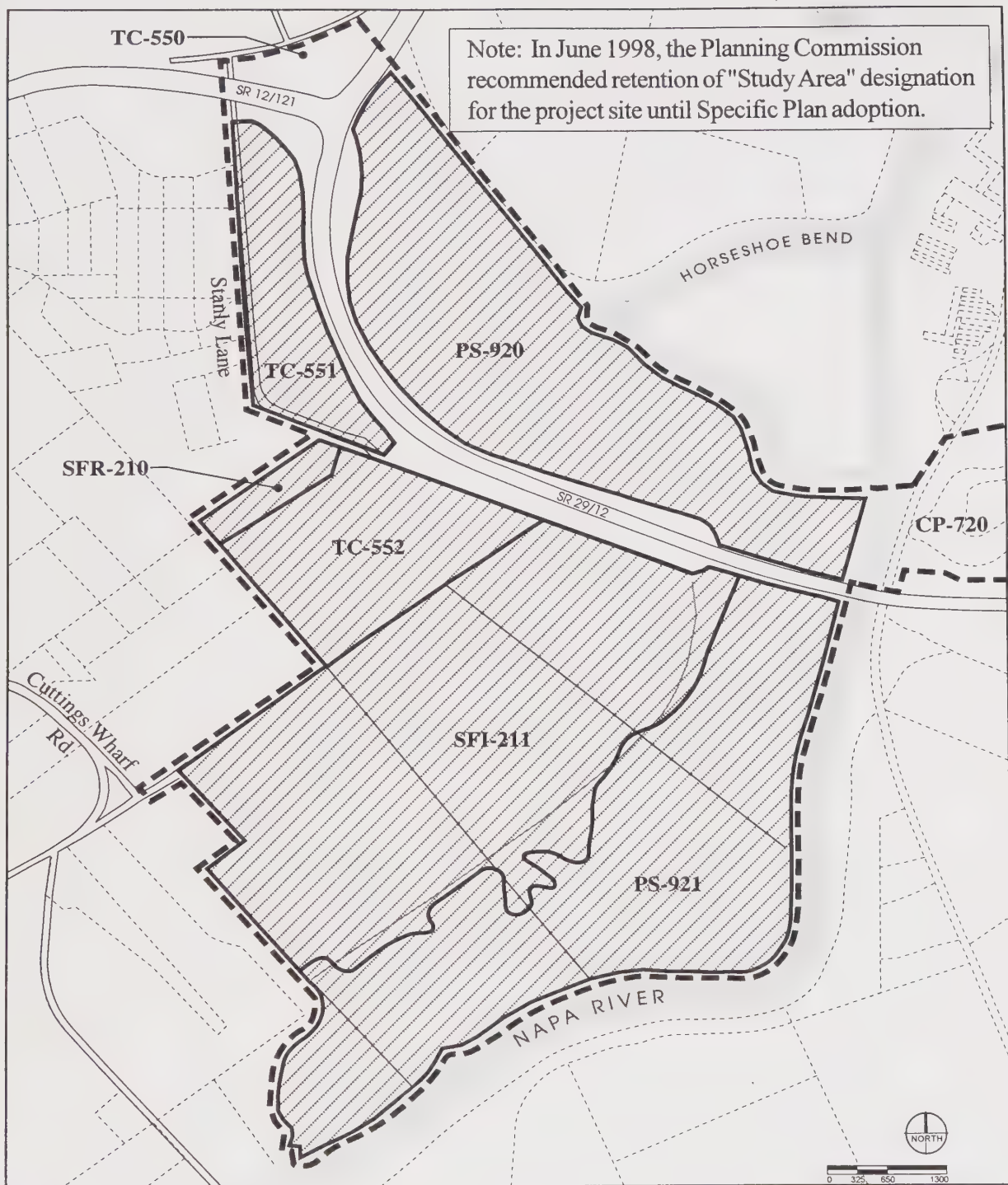
(a) *TC – Tourist Commercial.* This designation provides for commercial retail and service uses oriented toward tourists and other visitors to the community. The designation includes destination-resort hotels, motels, and their recreational amenities, such as golf courses and related clubs and facilities. Visitor-serving retail uses which emphasize the historic role of the Napa Valley in viticulture, such as wineries and wine centers, are also permitted. The corresponding Floor Area Ratio (FAR)<sup>2</sup> for pods TC 551 and 552 is not to exceed 0.5.

(b) *SFR – Single-Family Residential.* This designation applies to areas intended to develop into a single-family detached unit pattern at densities generally of 0 to 7 units per net acre. However, Table 1-4 of the *Draft Policy Document* indicated that residential densities in the Stanly Ranch Planning area would be defined by a Specific Plan and would be limited to a maximum of 600 residential units for pods SFR-210 and SFI-211 combined. The *Draft Policy Document* states

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<sup>2</sup> FAR refers to the ratio of square footage to land area. For example, an FAR of 0.5 means that for every acre of land (43,560 square feet), no more than 21,780 total square feet of development would be allowed (independent of the height of structures).





#### LAND USE DESIGNATION

TC	Tourist Commercial
SFR	Single Family Residential
SFI	Single Family Infill
CP	Corporate Park



RUL Line/City of  
Napa Corporate Limit



Project Site

Source: EDAW, 1997/Envision Napa 2020, Draft Policy Document, City of Napa 1996.

## STANLEY RANCH

### SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT

Figure IV.B-2  
City of Napa 1996 Draft General Plan Policy Document Land Use Designations

that the “range of densities [proposed by] the Stanly Ranch Specific Plan area are expected to be between 2 and 15 homes per acre.”

(c) *SFI – Single-Family Infill*. This designation allows a range of development types consistent with permitted densities where there is no established neighborhood character. Housing types include detached and attached single-family homes, secondary residential units, planned unit and cluster developments, duplexes and triplexes. Residential densities in this designation generally range from 3 to 8 units per net acre but may be higher in limited instances. As stated above, for the combined pods SFR-210 and SFI-211, the 1996 *Draft General Plan Policy Document* defined a maximum of 600 residential units. Non-residential uses, including recreational uses, with a maximum FAR of 0.3 may also be allowed within this designation at the discretion of the City.

(d) *PS – Public Serving*. This designation provides for public and quasi-public sites dedicated to community-serving purposes. This designation was also used to identify large tracts of privately owned undeveloped land with significant environmental limitations to development.

Reader Note: In June, 1998, in recognition of the ongoing Stanly Ranch Specific Plan process, the Planning Commission recommended removal of the above designations for the site and retention of the existing General Plan “Study Area” designation and definition. The *Draft SRSP* and EIR are to provide sufficient detail to determine the appropriate General Plan land use designations for the Stanly Ranch property. Additionally, when the Commission recommended a new “Resource Lands” land use designation, they modified the “PS Public Serving” description to delete the above-noted second sentence regarding privately owned lands. Thus, the *Draft SRSP* is expected to update the “PS” lands to “RA-Resource Area”. Final approval of these changes by the City Council had not occurred at the time of preparation of this Draft EIR.

b. *Napa County General Plan*. The *County General Plan* is not an “applicable general plan” within the meaning of CEQA Guidelines section 15125, as the entire site lies within the City of Napa. The project must therefore conform to City policies, standards and requirements, but there is no parallel legal requirement with respect to the *County General Plan*. It is worth noting that the *County General Plan* Land Use Map shows the site under the designation “Cities” (as is the remainder of the City of Napa) (Napa County, 1992). County land use designations are shown for informational purposes in Figure IV.B-3. County lands adjacent to the *Draft SRSP* area, along its western, northern and northeastern boundaries, are designated Agricultural Resource and Agricultural Watershed and Open Space. Both of these designations are intended to identify areas in which agriculture is and should

continue to be the predominant land use. Lands to the south and southeast of the *Draft SRSP* area, which include the Napa Sanitation District facilities, the Napa County Airport, and adjacent lands are designated Public Institutional and Industrial in the *Napa County General Plan*.

c. Zoning. The entire *Draft SRSP* area is within the City of Napa's corporate boundary. The majority of the lands surrounding and immediately adjacent to the *Draft SRSP* area are within the jurisdiction of the County. Current City zoning designations for the proposed *Draft SRSP* area and surrounding lands are shown in Figure IV.B-4. County zoning designations are also shown for informational purposes only.

(1) City of Napa Zoning. The adopted zoning map of the City of Napa designates land within the *Draft SRSP* area as Planned Community (P-C) District.

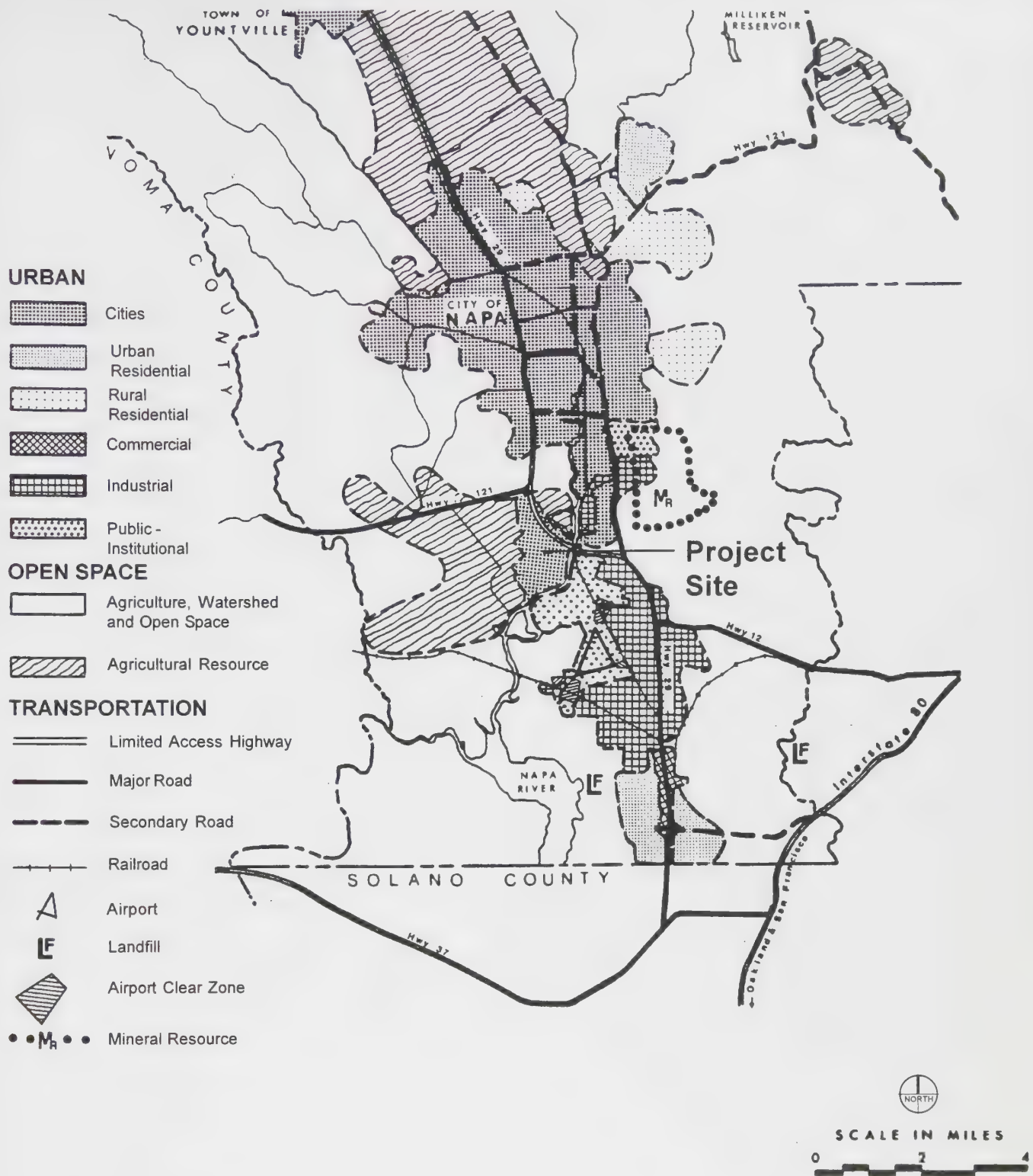
The text of the City's Zoning Ordinance (City of Napa, 1996c) states that the intent of the P-C district, is "to provide for the long-term development of large tracts of land so as to insure that the entire tract will be planned to provide an environment that will enhance the surrounding area and be of benefit to the entire community and reflect the goals set forth in the general plan of the City of Napa". The *Draft SRSP* would establish new zoning regulations for the site.

The flood plain management combining district (:FP) shown on the zoning map, and other applicable regulations which apply to the project site, given site-specific conditions, are discussed below:

(a) Flood Plain Management Combining District (:FP). Portions of the *Draft SRSP* area are subject to flood plain management regulations as indicated on the City's zoning map by the :FP Flood Plain Combining District suffix (see Figure IV.B-4). This zoning designation is applied to all areas and lots within the "Special Flood Hazard Areas Inundated By 100-Year Flood" and "Floodway Areas" on the maps entitled "Flood Insurance Rate Map, City of Napa, California." The zoning ordinance sets forth specific development standards and permitting requirements for lands zoned :FP Combining District.

(b) Agricultural Buffer (:CR-7). Section 17.60.090 of the City of Napa Zoning Ordinance (City of Napa, 1996c) requires an agricultural buffer plan for all residentially-zoned lots which are directly adjacent to the Rural/Urban Limit (RUL) line and properties located outside of the RUL line which are designated Agricultural Resource in the *County General Plan*. The buffer plan is to include an agricultural setback of not less than 80 feet from the property line adjoining the RUL line for the location of dwellings or other structures designed for human habitation. Other requirements include a 15-foot landscape buffer within the setback, noise reducing



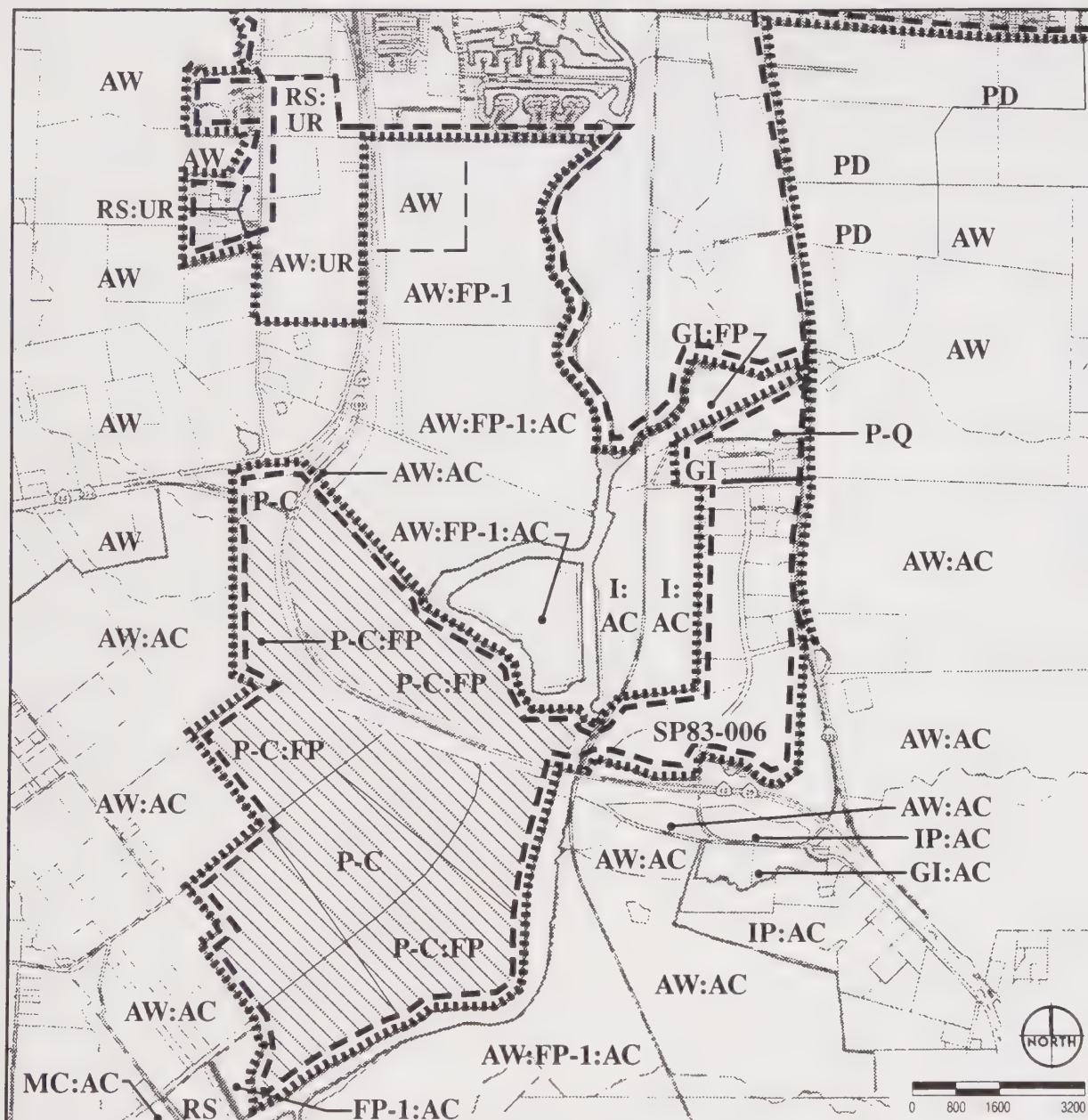


Source: General Plan Land Use Designations from Napa County General Plan, 1992.

# STANLY RANCH

## SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT

Figure IV.B-3  
Napa County General Plan Land Use Designations



#### CITY OF NAPA ZONING

GI General Industrial  
P-C Planned Community Zone  
SP 83-006 Specific Plan  
:FP Flood Plain



RUL Line



Napa City Limit



Project Site

#### NAPA COUNTY ZONING

AW Agricultural Watershed  
GI General Industrial  
I Industrial  
IP Industrial Park  
MC Marine Commercial  
RS Residential Single Family  
PD Planned Development  
:AC Airport Compatibility  
:FP-1 Primary Floodplain  
:UR Urban Reserve

SOURCE: CITY OF NAPA AND BRADY/LSA

## STANLEY RANCH

SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT

Figure IV. B-4  
Existing City and County Zoning Designations

design as needed, and a recorded notice to run with the land notifying residents they may be subject to agricultural nuisance impacts, and that the nearby farmer has the "right to farm". Properties proposed for residential use along the western border of the site would be required to comply with these requirements.

(c) *Hillside Overlay District (:HS)*. The Hillside Overlay District :HS is applied to hillside areas which have a slope of fifteen percent or greater. The current zoning map does not designate any portion of the Stanly Ranch as :HS (City of Napa, 1997). Approximately 17 acres (<2 percent) of the 918-acre site (limited to Home Hill and Cistern Hill) have slopes in excess of 15 percent, and would fall under the jurisdiction of the Hillside Overlay District. The :HS District contains density formulas which are applied to the entire site to calculate overall permitted densities, and provides development guidelines, such as grading guidelines and building height limits, for these areas. In the case of Stanly Ranch, overall development proposed is well below the amount of development which would be permitted if densities typical of single-family land use designations were applied to the site. Only about 17 acres of the 900+-acre site has slopes over 15 percent, and development is clustered to avoid much of this area. Thus, densities have been "preadjusted" to account for limited hillside constraints. Nevertheless, hillside development guidelines would apply in the 15 percent (+) areas.

(2) Napa County Zoning. All County lands immediately adjacent to the project site are zoned Agricultural Watershed (AW) in the *Napa County Zoning Ordinance* (1991). This zone is applied to areas in predominantly agricultural use (where watershed areas, reservoirs and flood plain tributaries are located) to protect agricultural uses, watershed, and floodplain tributaries from most types of nonagricultural uses and from fire, pollution and erosion. Some of the adjoining AW lands are designated with combining districts such as Airport Compatibility (:AC) and Primary Floodplain (:FP-1) as shown in Figure IV.B-4. The :AC combining district designation applies regulations and standards to development in the vicinity of public-use airports. No building permits will be issued in the :AC combining district unless an aviation, hazard and noise easement acceptable to the Director of Aviation is recorded. The Primary Floodplain (:FP-1) combining district establishes land use regulations for lands adjacent to the Napa River that are subject to inundation and flooding. Public uses such as the Napa Sanitation District are permitted in AW zoning districts. County zoning is provided for information purposes; County zoning regulations do not apply to lands within the City. In conjunction with County (and City) *General Plan* land use designations, however, County zoning regulations identify that there are tools in place which protect County agricultural lands outside the City RUL.

d. Rural/Urban Limit (RUL) Line. The RUL line defines the geographic boundaries of urban residential development within both incorporated and



unincorporated portions of the City of Napa planning area. The RUL line is intended to provide sufficient land area to accommodate not only the City's projected housing needs, but also the industrial, commercial and service areas required to serve the population (City of Napa, 1986).

As expressed in the adopted *General Plan*, it is the City's policy not to allow urban development beyond the RUL. The *General Plan* supports this policy by providing "adequate development potential within the RUL to accommodate urban growth beyond an expected population of 75,000 by the year 2000" (City of Napa, 1986). At the same time, the *General Plan* includes the policy that population within the RUL shall not exceed 75,000 by the year 2000. Residential densities designated in the *General Plan* are intended to accommodate this growth without significantly expanding the City into agricultural areas, hillside and other open lands.

The *Draft General Plan*, as recommended by the Planning Commission in June, 1998, retains the RUL with *no* adjustments, and describes it as defining the extent of urban development through the year 2020. As shown in Figure IV.B-1, the RUL generally coincides with the boundaries of the proposed *Draft SRSP* area.

The *Draft General Plan* establishes a number of policies that relate to the RUL and the City's growth management. Among these, and of relevance to the *Draft SRSP*, is the City's intent to work with the County to ensure that land outside of the RUL is conserved primarily for agricultural and other open space uses. The *Draft General Plan* also establishes the City's intent to provide a buffer between residential uses and productive agricultural uses outside the RUL, and to "feather" new residential development within the RUL. The *Draft General Plan* defines the "feathering" concept as "allowing progressively lower density residential development close (within one quarter of a mile) to the RUL."

e. Congestion Management Program. State law requires all counties in the State of California with a population center of 50,000 or more to establish a Congestion Management Agency (CMA) that would biennially prepare and monitor a Congestion Management Program (CMP). The Napa CMA is a Joint Powers Agency composed of representatives of Napa County and all of the incorporated cities within the County. The CMP prepared by the Napa CMA includes the following elements:

- CMP System Definition;
- Traffic Level of Service (LOS) Standards;
- System Performance Measures;
- Trip Reduction and Travel Demand Management Element;
- Land Use Analysis Program;

- Capital Improvement Program; and
- CMP Monitoring and Conformance Program.

The CMP roadway network includes all state highways and designated principal arterials. Roadways defined as part of the CMP network within the project vicinity include State Route (SR) 29, SR 12, SR 121 and SR 221. Only one principal arterial, Trancas Street from SR 121 to SR 29, is included in the CMP network. Impacts related to CMA thresholds are addressed in Section IV.C of the EIR, Transportation and Circulation.

f. LAFCO Policies. State law requires each county to establish a Local Agency Formation Commission (LAFCO) empowered to approve boundary changes and incorporations for cities, counties and special districts and to establish local “Spheres of Influence (SOI)”.

A SOI defines the long-term physical boundaries and service area of a local agency. The *Draft SRSP* area, while entirely within the City’s corporate limits and RUL line, is currently outside of LAFCO’s adopted SOI for the City, which is an unusual situation.<sup>3</sup>

The *Draft SRSP* area is also entirely outside of the Napa Sanitation District (NSD) SOI. In order to connect to NSD facilities located across the Napa River, an amendment of the NSD SOI and subsequent annexation of the *Draft SRSP* area to the NSD is required.

A number of statutory provisions govern LAFCOs. Government Code Section 56300 provides that LAFCOs must exercise their powers in a manner that encourages and provides planned, well-ordered, efficient urban development patterns with appropriate consideration of preserving open space.<sup>4</sup> In addition to State law, individual LAFCOs adopt their own local policies which are similar to and implement the State laws. Both local and state policies are analyzed in the LAFCO public policy impact discussion of this EIR.

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<sup>3</sup> The statutory definition of “SOI” presupposes that it must extend at least as far as a city’s municipal boundaries, as Government Code Section 56076 defines an SOI to be “a plan for the probable *physical boundaries* [emphasis added] and service area of a local agency as determined by” LAFCO. See also 1990 State General Plan Guidelines, p. 7 figure which generically illustrates current City limits, with a larger LAFCO-adopted “SOI” around it. See also *City of Agoura Hills v. LAFCO* (1988) 198 Cal.App.3d 480 [243 Cal.Rptr 740] (holds that CEQA did not apply to the adoption of a SOI that did not expand SOI boundaries beyond City limits.)

<sup>4</sup> Government Code Section 56059 defines “open space” as “any parcel or area of land or water which is substantially unimproved and devoted to any open space use, as defined in Section 65560.” Among the uses described in the latter section are “agricultural lands”.

g. Airport Land Use Compatibility Plan. The chief responsibility of the Napa County Airport Land Use Commission (ALUC) is to adopt an Airport Land Use Compatibility Plan that addresses each airport's anticipated future growth over a 20-year period. The *Napa County Airport Land Use Compatibility Plan* was adopted in 1991 and updated in 1993 (County of Napa, 1991). Its purpose is to provide guidance to the ALUC in reviewing the land use plans and zoning regulations of affected local jurisdictions and to establish land use compatibility policies and guidelines for local jurisdictions affected by airport activities.

State law requires the referral of certain projects, including local general and specific plans to the ALUC for review for consistency with the *Airport Land Use Compatibility Plan*. If a local plan is determined to be inconsistent with the *Airport Land Use Compatibility Plan*, the affected local agency must either amend its general plan (and any applicable specific plan and zoning ordinance) or take specific steps to override the ALUC. Per Public Utilities Code Section 21676, the local agency may, after a public hearing, overrule the ALUC by a two-thirds vote of its governing body.

One of the County's three airports, the Napa County Airport, lies just south of the RUL and project site, between the Napa River and SR 29, within approximately three-quarters of a mile of the *Draft SRSP* area (see Figure IV.B-2). The *Draft SRSP* area is within the planning boundary of the *Airport Land Use Compatibility Plan*. The *Airport Land Use Compatibility Plan* designates six compatibility zones around the Napa County Airport ranging from A (most restrictive) to F (least restrictive). The relationship of designated compatibility zones to the *Draft SRSP* area is shown in Figure IV.B-5. The *Draft SRSP* area includes lands that fall within compatibility zones D, E, and F. Each zone is described below:

- *Zone D Traffic Pattern Area*: These areas are routinely overflowed by aircraft and experience frequent single-event noise intrusion. Overflights can range from 300 to 1,000 feet above ground level. Departing aircraft and those on circle-to-land approaches are at lower altitudes, indicating a moderate risk of accident potential at the periphery of this zone. Residential uses and uses hazardous to flight are prohibited in this zone.
- *Zone E Common Flight Paths*: Aircraft on approach in these areas are generally 1,000 feet above the ground with limited risk of accident potential. These areas are affected by frequent aircraft noise intrusion and overflight annoyance. The *Airport Land Use Compatibility Plan* recommends maximum residential densities be in accordance with the local, adopted general plan and zoning designations. Prohibited uses include noise sensitive outdoor uses such as amphitheaters. Additionally, indoor uses should not attract more than 150 persons per net acre and outdoor uses should not attract more than 300 persons per net acre.





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- *Zone F Other Airport Environs:* Aircraft overflights can occur anywhere in these areas during aircraft departure or takeoff. Overflight annoyance is the primary impact element. The risk of accident potential is very low. Maximum residential densities are recommended to be in accordance with the local, adopted general plan and zoning regulations. Referral to the ALUC for review prior to approval is recommended. Noise sensitive outdoor uses are not recommended.

A 35-foot height limit applies to buildings within Zones D, E and F.

## **2. Impacts and Mitigation Measures**

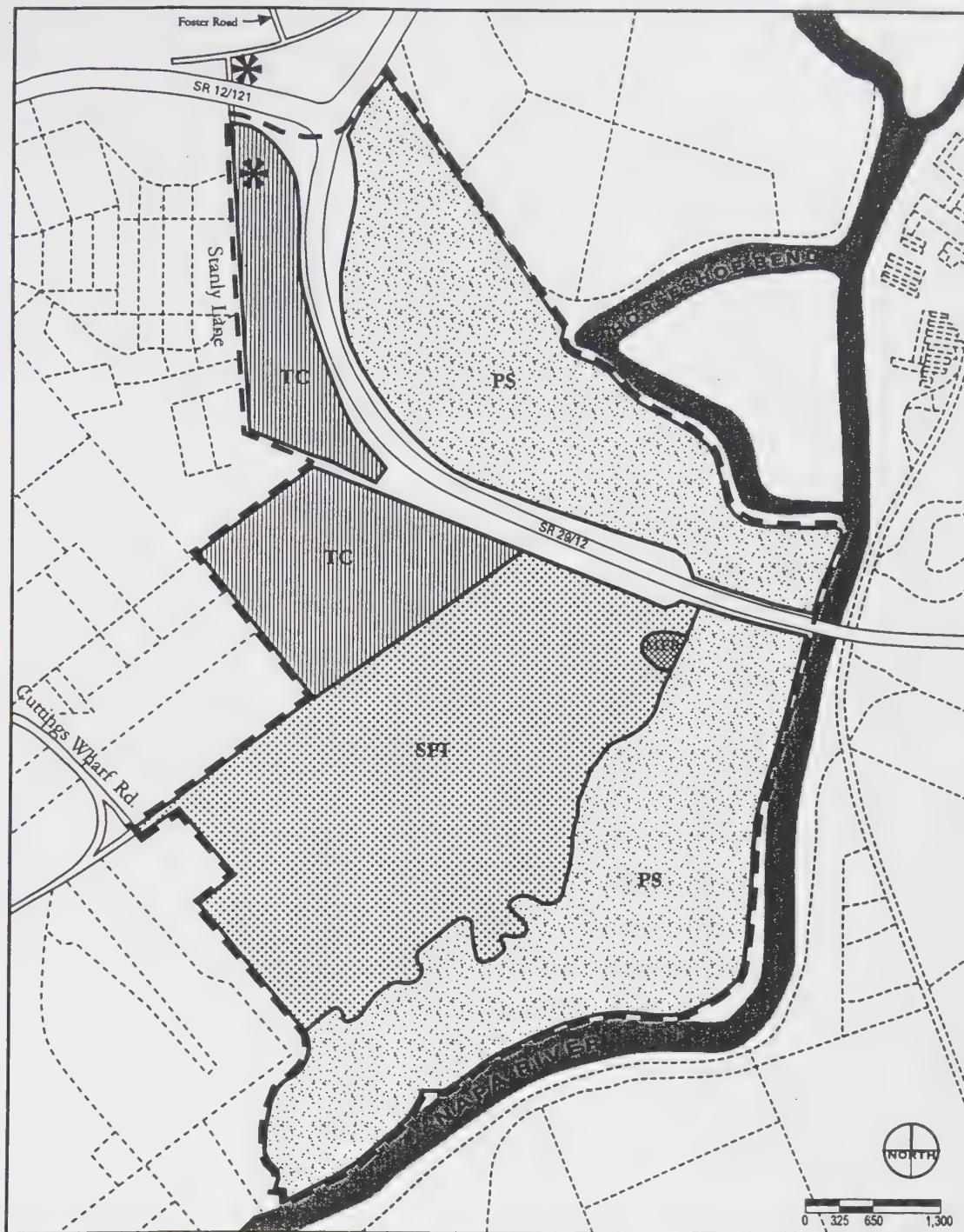
- a. Overview. This section provides a summary of the proposed project's land use policy and regulatory components and assesses the project's consistency with existing City and other applicable land use planning policies and regulations.
- b. Policy and Regulatory Components of the Proposed *Draft SRSP*. The *Draft SRSP*'s proposed land use designations, development standards and zoning, design guidelines and development agreement are described below:

(1) Proposed Land Use Designations. As shown in Figure IV.B-6, the *Draft SRSP* proposes four *General Plan* land use designations: Tourist Commercial (TC); Single-Family Infill (SFI); Multi-Family Residential (MFR); and Public Serving (PS). (NOTE: Following the June, 1998, Planning Commission recommendation, it is expected that the "PS" designation would become "RA-Resource Area". Additionally, if the on-site fire station location is approved, this site would be designated "PS Public Serving.")

The *Draft SRSP* proposes tourist-related commercial uses in both the panhandle area east of Stanly Lane and west of SR 29/12, and the area southwest of Stanly Lane and north of Old Suscol Road. Both of these areas would be designated TC. Commercial uses would include the proposed winery and wine center located in the panhandle area, and the resort area which would include a main lodge, spa, golfcourse and golf clubhouse.




The SFI residential designation, which permits a variety of housing types and densities, as well as recreational facilities, is proposed in the uplands south of Stanly Lane and southeast of Old Suscol Road. This designation encompasses all of the for-sale residential neighborhoods and a part of the golf course. An MFR designation is proposed for the employee housing area, proposed to be located immediately south of Stanly Lane near the SR 29/12 bridge.





### Proposed Land Designations

-  TC Tourist Commercial
-  MFR Multi-Family Residential
-  SFI Single Family Infill

-  PS Public Serving (or updated RA: Resource Area 6/98)
-  Project Boundary
-  Alternative PS Public Serving Land Use for Fire Station or Park/Fire Station depending on which site selected.

Source: EDAW 1997/General Plan Designations from City of Napa Draft General Plan, Draft Policy Document, 1996

## STANLY RANCH

### SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT

Figure IV.B-6  
Proposed General Plan Land Use Designations for Project Site based on Specific Plan



A Public Serving (PS) designation is proposed in the North and South Lowlands. Proposed uses would be limited to open space and similar uses such as wildlife preserves, trails, agriculture in a portion of the North Lowlands, an employee parking lot on an upland portion of the South Lowlands near SR 29/12, a private Environmental Interpretive Center near the parking lot, and potential utility/wastewater facilities. A conservation easement is proposed to protect the Lowlands, both North and South, from any other development.

(2) Development Standards and Zoning. Appendix B of the *Draft SRSP* proposes draft development standards and zoning regulations for the Specific Plan area.

The *Draft SRSP* proposes a Specific Plan (SP) District for the entire site. When applied to properties after the adoption of a specific plan, it serves to alert individuals to the policies and regulations of a specific plan (City of Napa, 1997). As zoning regulations implement and must be consistent with the General Plan and Specific Plan, the Appendix B draft found in the May, 1997 *Draft SRSP* is intended to be revised prior to action on the *Draft SRSP* and following review of the Draft EIR. The draft zoning regulations in Appendix B of the *Draft SRSP* refer to standard City zoning districts; City staff has recommended and the applicant has agreed to provide stand-alone zoning districts more closely tailored to the proposed *Draft SRSP* uses. The following discussion reflects SP Zone District changes agreed to by the applicant to date (Hasser, 1998).

The *Draft SRSP* proposes to divide the Stanly Ranch SP District into four Specific Plan zones: SP Zone 1 – Resort; SP Zone 2 – Residential; SP Zone 3 – South Lowlands; and SP Zone 4 – North Lowlands. The four designations are shown in Figure IV.B-7.

(a) *SP Zone 1 – Resort.* SP Zone 1, which implements the “Tourist Commercial (TC)” *Draft SRSP* land use designation, includes all of the resort, wine center, winery and a portion of the golf course. As shown in Figure IV.B-7, portions of the golf course and the golf clubhouse and maintenance buildings extend into areas designated with the Single-Family Infill (SFI) land use designation. Golf courses are allowed in both proposed land use categories. (Public facilities such as a fire station also would be permitted in this district).

(b) *SP Zone 2 – Residential.* SP Zone 2 would include the five proposed residential neighborhoods and the employee housing area. The *Draft SRSP* proposes one residential district to allow flexibility in providing various housing types within the neighborhoods (EDAW, 1997). The *Draft SRSP* defines a maximum development program which sets forth maximum densities for each parcel within the SP Zone 2 (see Table IV.B-1). Permitted uses in SP Zone 2 include a mix of

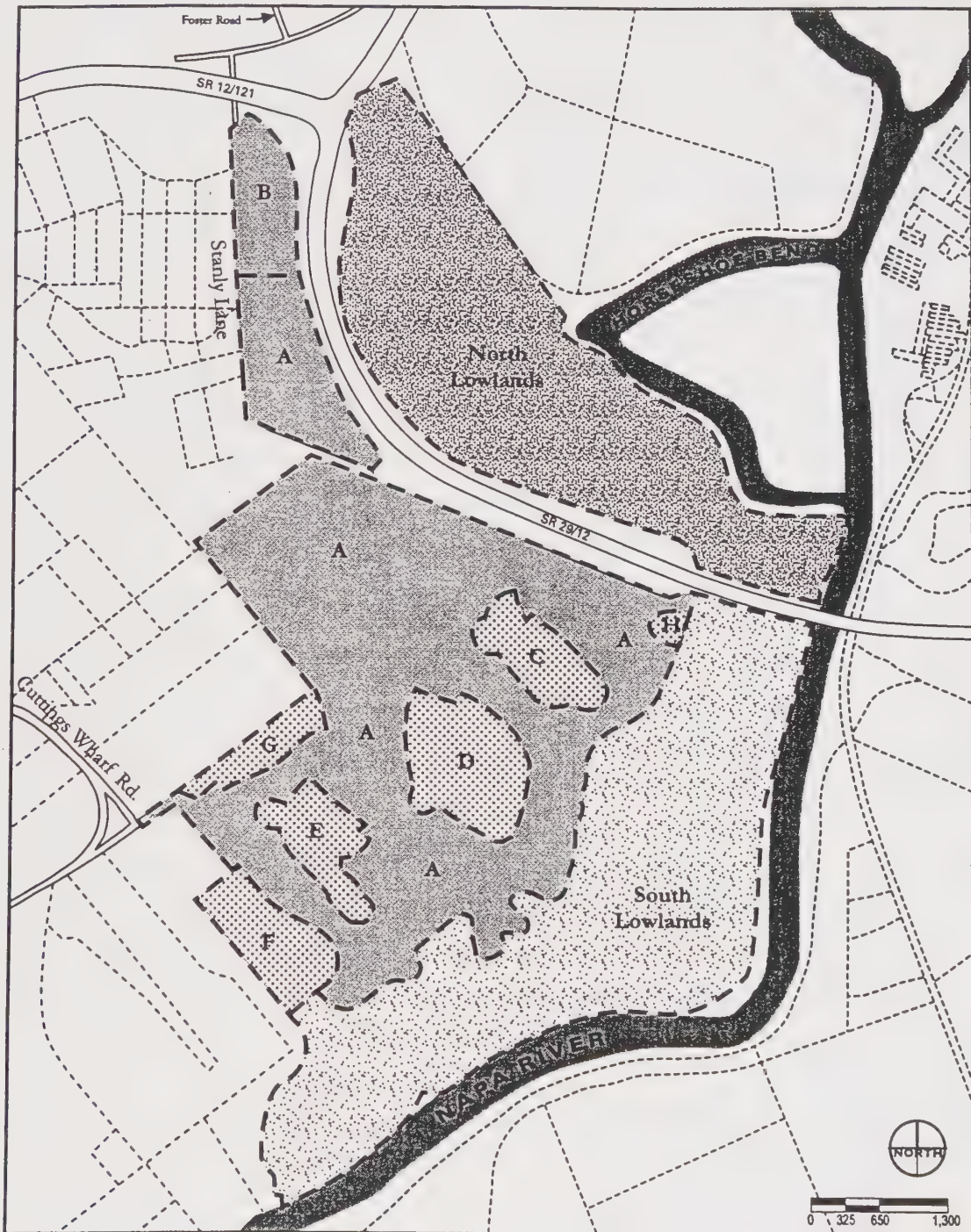
housing types and densities that include: one single-family detached unit per lot; duplexes; townhomes or similar housing types; and, apartments in the employee housing area. Day care facilities, trails, recreation areas and other uses found consistent with the *General Plan* and Specific Plan - would also be permitted in SP Zone 2.

(c) *SP Zone 3 – South Lowlands.* SP Zone 3 includes the South Lowlands southwest of the residential community and south of the SR 29/12 bridge. Allowed uses for this area are a private Environmental Interpretive Center, an employee/public parking lot at the end of Stanly Lane near SR 29/12, possible utility/wastewater treatment facilities, trails, and open space or similar uses such as wildlife preserves. Existing grazing uses are proposed to cease and a conservation easement or other enforceable restriction is proposed for this property to exclude other future development (EDAW, 1997).





(d) *SP Zone 4 – North Lowlands.* Proposed uses for this area include open space or similar use such as wildlife preserves, possible vineyards on an upland portion of the area near SR29/12, trails, and possible utility/wastewater treatment facilities. Cattle grazing and hay farming would be removed from the project site in order to allow the land to revert back to a more natural state. A conservation easement or other enforceable restriction is proposed to exclude other future development.

(3) Design Guidelines. Appendix A of the *Draft SRSP* sets forth design guidelines for the *Draft SRSP* area. The guidelines describe an overall community theme to be reflective of Napa Valley's indigenous characteristics, including its landscape, climate, history and lifestyle. The design of the community is intended to respond to these characteristics through the incorporation of vernacular design elements, materials and historic settlement patterns. The proposed design guidelines address the following categories:

- Overall Landscape Concept
- Cultural Landscape and Community Entryways
- Overall Architectural Concept
- Resort
- Panhandle Visitor-Serving Commercial
- Residential Community
- Environmental Interpretive Center
- Environmental Graphics and Signage
- Site Furnishings



### Proposed Zoning Districts

- |  |  |   |   |
|--|--|---|---|
|  <b>SP1 - Resort/Golf</b> |  <b>SP2 - Residential</b> |  <b>SP3 - South Lowlands</b> |  <b>SP4 - North Lowlands</b> |
| A. Resort Golf   | C. Resid. Neighborhood   |   |   |
| B. Winery/Wine Center  | D. Resid. Neighborhood   |   |   |
|  | E. Resid. Neighborhood   |   |   |
|  | F. Resid. Neighborhood   |   |   |
|  | G. Resid. Neighborhood   |   |   |
|  | H. Employee Housing  |   |   |

Source: EDAW, Brady/LSA 1997

## STANLEY RANCH

### SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT

Figure IV.B-7  
Proposed Specific Plan Zoning

BRADY ■ LSA  
PLANNERS AND LANDSCAPE ARCHITECTS



**Table IV.B-1  
MAXIMUM DEVELOPMENT PROGRAM  
FOR PARCELS IN SP ZONE 2**

N'hood/ Parcel	Gross Acreage <sup>a</sup>	Anticipated Housing Type	Home Type Range <sup>b</sup>	Gross Density Range <sup>c</sup>
1/C	19	Vineyard Homes & Villa Homes	97-116	5.1-6.1
2/D	26	Vineyard Homes	133-159	5.1-6.1
	8	Townhomes	64-96	8.0-12.0
	34	Total for Neighborhood	197-255	5.8-7.5
3/E	16	Vineyard Homes & Villa Homes	82-98	5.1-6.1
	4	Townhomes	32-48	8.0-12.0
	20	Total for Neighborhood	114-146	5.7-7.3
4/F	20	Custom Homes & Vineyard Homes	68-102	3.4-5.1
5/G	9	Custom Homes & Vineyard Homes	30-46	3.4-5.1
H	3	Employee Housing (Apartments)	Up to 54	18.0
<b>Total</b>	<b>105</b>		<b>594<sup>d</sup></b>	<b>5.7 du/ac<sup>e</sup></b>

- <sup>a</sup> Gross acreage for each neighborhood includes private open space/parks and residential streets. All acreages are approximate and will be determined at tentative tract map stage.
- <sup>b</sup> Home Type Range will depend on the percentage of anticipated products planned for each neighborhood. The actual number of units constructed in Neighborhoods 1-5 would be closer to the lower number, because the total number of units proposed for the market rate neighborhoods shall not exceed 540.
- <sup>c</sup> Gross densities are derived from dividing total units by neighborhood acreage. Lot sizes for custom homes range from 9,000 sq.ft to one acre; for vineyard homes 6,000-8,000 sq.ft, and villa homes from 5,000-6,000 sq.ft. Lot sizes for townhomes or similar product types are anticipated to be approximately 3,500-5,000 sq.ft.
- <sup>d</sup> Total number of residential units (non-resort) that can be considered for the property is 600 as per the *Draft Policy Document*. Note: In June 1998, the Planning Commission recommended that a "Study Area" designation be retained. Thus, this unit limit may no longer apply. Final approval of these changes by the City Council had not occurred at the time of preparation of this Draft EIR. The *Draft SRSP* assumes a maximum of 540 for-sale residential units and 54 employee housing units, or a total 594 residential units.
- <sup>e</sup> Overall average gross density is 5.7 dwelling units per acre (du./ac).

(4) Development Agreement. As is typical for complex, multi-phased projects, the applicant proposes to enter into a Development Agreement with the City. Development Agreements must specify permitted uses, density and intensity of uses, maximum heights and sizes of proposed buildings, and provisions for reservation and dedication of land for public purposes. They may also address many other aspects of the project, from public benefits to be provided which might not otherwise be required (e.g., low income housing) to financing of necessary public facilities and reimbursement over time. They often provide assurance that the applicant may proceed with a project in accordance with policies and regulations in place at the time of approval of the Development Agreement. While Appendix D of

the May 5, 1997 *Draft SRSP* included a preliminary Development Agreement suggested by the applicant, a new Agreement is expected to be negotiated between the City and applicant prior to action on the Specific Plan.

c. Criteria of Significance. For this EIR and according to *Appendix G of the State CEQA Guidelines (Guidelines)*, the proposed project may be deemed to have a significant impact with regard to policy conformity if it would:

- Conflict with applicable adopted environmental plans and goals of the community where it is located;
- Conflict with the proposed plans and goals of the City of Napa contained in the August 1996 *Draft General Plan* should the *Draft General Plan* be adopted prior to action on the *Draft SRSP*;
- Conflict with applicable environmental plans or policies adopted by agencies with jurisdiction over the project; or
- Conflict with zoning regulations.

In addition to the project's relationship to the City *General Plan*, the *Draft General Plan*, and City zoning, this section addresses relevant policies of the Congestion Management Program (CMP), the Napa County *Airport Land Use Compatibility Plan* and LAFCO policies regarding SOI and annexation (i.e., annexation to the Napa Sanitation District).

d. Less-Than-Significant Public Policy Impacts. The following impacts have been determined to be less than significant.

(1) Project Relationship to LAFCO Adopted SOI. The *Draft SRSP* area, while entirely within the City's corporate limits since 1964 and the adopted RUL line since its inception in 1975, is outside of the adopted City SOI (City of Napa, 1996a). SOIs are developed to identify appropriate areas that may come into the City in the future. Since no City boundary change is sought, there would be no requirement for the City to request LAFCO revision of the City SOI or the need to meet LAFCO criteria for annexation.

As noted in the Setting section of this chapter, the statutory definition of "Sphere of Influence" presupposes that it must extend at least as far as a city's municipal boundaries, as Government Code Section 56076 defines an SOI to be "a plan for the probable *physical boundaries* [emphasis added] and service area of a local agency as determined by" LAFCO. See also 1990 State General Plan Guidelines, page 7 figure, which generically illustrates current City limits, with a larger LAFCO-adopted "SOI" around it. See also *City of Agoura Hills v. LAFCO* (1988) 198

Cal.App.3d 480 [243 Cal.Rptr 740] (holds that CEQA did not apply to the adoption of a SOI that did not expand SOI boundaries beyond City limits).

LAFCO policies are important as they relate to the Napa Sanitation District (NSD), which is the preferred wastewater treatment provider for the project. The project site is currently outside of NSD's SOI. The project proposes to request amendment of the NSD SOI boundary and to request annexation. Only if NSD could not supply the proposed project would the project propose to utilize an alternate on-site wastewater treatment facility.

***Impact POL-A: Implementation of the Draft SRSP would result in development proposed to be served by the Napa Sanitation District (NSD) that is outside of the adopted NSD Sphere of Influence (SOI). Based on the identified criteria of significance and LAFCO policies, the public policy impact would be less-than-significant. (LTS)***

An application to expand the NSD SOI to include the *Draft SRSP* area must be submitted to and approved by the Napa County LAFCO prior to annexation of the site into the District.

(a) *Local LAFCO Policies.* Napa County LAFCO has several policies pertaining to Special Districts, and Special District SOI modifications, several of which are relevant to the Proposed Project:

- Policy 1 states it is a basic policy that extension of urban services acts to promote urban development and that urban development belongs in urban areas.

The project site is designated "cities" on the County General Plan; city policies also act to promote urban development in the City while protecting lands outside the City.

- Policy 2 states land designated "agricultural or open space" by applicable City or County general plans shall not be approved for inclusion within any district SOI for purposes of urban development through the extension of services.

Neither the City or County general plans designate the project site as agriculture or open space. The County plan designates the site as "cities" while the City designates the site as "Study Area", also noting that it is "included within the RUL as an appropriate site for urban development."

- Policy 3 states an adopted SOI shall be used as a guide when considering annexations...but inclusion of land within an adopted Sphere shall not be construed as ...approval of any annexation.



The Stanly Ranch would be applying for an SOI amendment in order to request annexation, which is the typical process.

- Policy 4 states that both the necessary change in SOI and annexation request may be considered at the same meeting as long as the SOI boundary is resolved first.

This is a procedural policy with which the project would comply.

LAFCO also has certain general policies which pertain to evaluating proposals related to agricultural and open space lands. However, these do not apply, as Policy A states that the Commission will rely on the Napa County General Plan to determine “designated agricultural and open space lands,” even where there may be conflicts between a city and county general plan. The Napa County General Plan designates the project site as “cities”.

A final set of LAFCO policies relate to “Cooperative Planning and Development Programs.”

- Policy B of this section establishes a preference for infill within adopted Spheres of Influence. Under this policy LAFCO shall encourage the City to first develop “existing vacant and under-developed lands located within the City’s adopted SOI.”

Napa is a largely built out city. Information from the City’s *General Plan* indicates that remaining usable vacant/agricultural or underutilized sites total only about 8 percent of land within the RUL. Stanly Ranch is the largest single remaining area of such lands within the City’s municipal boundary and RUL. As appropriate, most other lands have been developed prior to development of this part of the City.

- Policy C states that urban development and utility expansion programs should be planned and programmed by the City on a staged basis in cooperation with the County and Commission.

The use of a Study Area/Specific Plan as a planning mechanism for the area is consistent with this policy, as is the fact that the City has allowed development to occur elsewhere within the City limits first. The “Study Area” designation has been a mechanism to slow development of this area as compared to other parts of the RUL in that the project site requires extensive study and environmental review prior to any development occurring. The City has participated with the County on south County growth issues, and the *Draft General Plan* and *Draft SRSP* and their respective EIRs are referred to and may be reviewed by both the County and Commission.

- Policy E states that “areas which cannot be provided with an urban level of essential public services, such as public water, sewer, fire protection and emergency response shall be considered for sphere inclusion and eventual annexation and development on an exceptional basis. Economic and planning justification shall be provided by the City.”

The proposed project and this EIR (Section IV.J and K) identify how the project would be provided with urban level essential services: water infrastructure is already available to the site, and through the City’s retrofit program, voluntary additional retrofits and use of reclaimed water, the project would not increase water demand; fire protection and emergency response are addressed through construction of a new fire station and inclusion of private security as well as provision of new revenues for additional police and fire personnel. Security needs would be met by a combination of private security and additional general fund revenues for additional police.

The Napa Sanitation District recognizes that there are existing service deficiencies and is acting to expand its facilities to overcome these deficiencies and serve planned development. Such expanded capacity may be available within the time frame of the proposed project. Stanly Ranch has identified several measures to minimize its impact on NSD wastewater treatment facilities. If annexation is permitted and capacity is available, the project would connect to the NSD plant across the river for wastewater treatment. This is the preferred alternative, and would also typically be the preferred alternative from a public policy standpoint, in that annexation to established service districts are preferred to establishing new districts or other means. (If NSD capacity were unavailable, the project alternatively proposes an on-site wastewater treatment facility to be run by a service district or the City). The proposed project could also assist NSD by providing a receiver site for NSD reclaimed water. Public utility impacts and mitigation measures related to wastewater are further covered under IV.K. Other public service impacts are described in Section IV.J of this document.

Special District “Dual annexation” policies do not apply in this situation, as the project site is already annexed to the City of Napa.

(b) *State Policies.* In addition to local policies, State policies govern LAFCO actions. Government Code Section 56377 states that, in reviewing “proposals” that “could reasonably be expected to induce, facilitate, or lead to the conversion of existing open space lands to uses other an open space uses”, LAFCOs shall consider the following policies:

- “[d]evelopment or use of land for other than open space uses shall be guided away from existing prime agricultural lands, unless that action would not promote the planned, orderly, efficient development of an area.”
- “[d]evelopment of existing vacant or non-prime agricultural lands for urban uses within the *existing jurisdiction of a local agency* [emphasis added] or within the SOI of a local agency should be encouraged before any proposal is approved which would allow ... the development of existing open space lands ... outside of the *existing jurisdiction of the local agency* [emphasis added] or outside of the existing SOI of the local agency.”

It is noted that the State Farmland Mapping Program identifies no lands on the project site as “Prime Farmland”. The Natural Resources Conservation Service does identify 170 acres of “Prime Farmland” soils on the site; nearly all of these soils are located in the North Lowlands, where a conservation easement is proposed to retain the lands in open space and agricultural uses.

The project site agricultural lands are within the existing jurisdiction of the local agency.

- Section 56841, subdivision (d) provides that, in reviewing a “proposal” a LAFCO shall consider:
  - “[t]he conformity of both the proposal and its anticipated effects with both the adopted commission policies on providing planned, orderly, efficient patterns of urban development, and the policies and priorities set forth in Section 56377.”

The proposed project appears to comply with Commission policies and priorities set forth in Section 56377.

Decisions on SOI modifications are specifically governed by Sections 56425 through 56428. These statutes require consideration of factors similar to those identified above. For example, LAFCO must consider “[t]he present and planned land uses in the area, including agricultural and open space lands”; “[t]he present and probable need for public facilities and services in the area”; “[t]he present capacity of public facilities and adequacy of public services which the agency provides or is authorized to provide” and “[t]he existence of any social or economic communities of interest in the area if the commission determined that they are relevant to the agency.”

It is noted that local LAFCO policies state that the County General Plan shall be used as the basis to identify designated agricultural and open space lands. As described in the Land Use section of Chapter IV of this EIR, present area land uses are largely agriculture; they also include Napa Sanitation District facilities south of



the project site and limited industrial uses immediately east of the project site. Planned uses for the project site are "Cities" in the County General Plan. The City General Plan currently designates the site as "Study Area" noting that "it is included in the RUL as an appropriate site for urban development." For the surrounding area, agricultural uses are planned to the west, north and northeast, while industrial and Sanitation District uses are planned to the southeast and south. Urban uses would be consistent with the City's and County's planned land use designations.

This EIR describes, in Chapter IV.J, the existing service capacities and service demands generated by the proposed project, identifying that the project, with incorporation of mitigation measures identified in this EIR, would fund and/or provide needed services through a variety of means.

Conditions of Approval POL-A: Implementation of the following Conditions of Approval shall be required:

- The applicant shall assist NSD in formally requesting a NSD Sphere-of-Influence amendment and annexation from LAFCO to annex the project site into NSD. The request shall be approved prior to the approval of a tentative map for the entire site or other similar approval per the Development Agreement for the project.
- If the request for annexation to NSD were not approved at that time, the applicant shall be required to implement an approved alternative method for providing wastewater treatment and disposal, such as an on-site wastewater treatment facility. If alternative methods of wastewater disposal are required, these shall be approved prior to approval of the tentative map for the entire site or other similar approval per the Development Agreement. Both alternatives shall be covered equally in the *Draft SRSP* prior to adoption.
- Mitigation measures recommended in the Public Utilities and Public Services sections of the EIR (IV.J and IV.K) shall be implemented.
- The discussion found in the *Draft SRSP* regarding Napa County LAFCO shall be rewritten prior to Specific Plan adoption to indicate:  
1) the fact that the project is not currently within the SOI of the NSD;  
and 2) the responsibilities of the applicant in coordinating with NSD in requesting a SOI amendment and annexation request from LAFCO.  
(LTS)

(2) Project Relationship to Airport Land Use Compatibility Plan. The *Airport Land Use Compatibility Plan* specifically refers to the Stanly Ranch as an area of concern with respect to future land use compatibility based on the expectation that it will develop with residential land uses. The *Airport Land Use*

+*Compatibility Plan* notes that future development plans and specific plans for this area should be referred to the Airport Land Use Commission (ALUC) for a consistency determination and recommends two specific land use compatibility measures for future development at the Stanly Ranch: 1) Residential development should be limited to areas outside of the traffic pattern (Zone D); and 2) Buyer notification should be required (i.e., dedication of overflight easements or deed notice).

***Impact POL-B: The Draft SRSP does not include adequate policies and development requirements to be compatible with the Airport Land Use Compatibility Plan regarding notification and other issues. (LTS)***

The *Draft SRSP* area includes lands within compatibility zones D, E and F. Figure IV.B-5 shows the relationship of defined *Airport Land Use Compatibility Plan* compatibility zones to proposed development areas. Noise-related impacts associated with the airport are addressed in Section IV.L of this EIR.

The *Airport Land Use Compatibility Plan* indicates that residential uses and all uses hazardous to flight are prohibited in Zone D. Typical development conditions for Zone D in the *Airport Land Use Compatibility Plan* include: building height limits of 35 feet; required overflight easements or deed notice and use restrictions; allowance for most non-residential uses, golf courses and low intensity parks, clustering of nonresidential development to maximize open land areas; and potential noise level reduction measures for noise sensitive uses. The *Draft SRSP* does not propose any development in Zone D, outside of public trails, a private Environmental Interpretive Center, parking lot and possible utility/wastewater treatment uses.

For Zone E, residential uses are acceptable. The *Airport Land Use Compatibility Plan* recommends building height limits of 35 feet, and residential densities in accordance with the affected local general plan and zoning designations with consideration of flight patterns and associated impacts incorporated into the project design. The *Airport Land Use Compatibility Plan* also recommends a maximum density for non-residential uses of 150 persons per net acre in structures or 300 persons per net acre in and out of structures. "Net acre" is defined as the total site area inclusive of parking and landscaping. This recommended maximum density is intended as a general planning guideline. Typical development conditions for Zone E include required overflight easements or deed notice and clustering of development outside of the flight path.

Development proposed by the *Draft SRSP* within Zone E includes the following: the residential community consisting of five residential neighborhoods, clustered to provide golf course open space; the employee housing area; the golf clubhouse; and

golf course. The adopted *City of Napa General Plan* designates the *Draft SRSP* area as “Study Area”, which requires a General Plan amendment prior to any development. The proposed project would result in redesignation of this area through the Specific Plan process. While any residential designation would represent an increase in residential density from “Study Area”, the Specific Plan is the appropriate process to provide for General Plan amendments. The only constraint to project density identified in the adopted *General Plan* is Policy B1b (under the heading “Residential Development”) which states that a project’s density and resultant population shall not exceed that which can be served by current or proposed (and funded) urban service levels. Existing and proposed urban services may not be adequate to serve the project (as discussed in Section IV.K of this EIR) and the City may elect to reduce on-site densities. Nevertheless, deed notices would be required for homes within Zone E.

Reader Note: While the *Draft SRSP* does conform (with limited mitigations) to the 1996 *Draft General Plan Policy Document* land use designations, the Planning Commission recommended in June, 1998, that the “Study Area” designation be retained, awaiting the outcome of the Specific Plan process.

For Zone F, which represents the lowest risk to development, the *Airport Land Use Compatibility Plan* again includes height limits of 35 feet. Overflight annoyance is the primary impact for these areas. Typical development conditions for Zone F include overflight easements or deed notice. The *Draft SRSP* proposes the main resort building, spa, 300 resort units, and winery in Zone F. The proposed wine center appears to be at least partially located outside of all Airport Land Use Compatibility Zones. The resort, winery and wine center are considered acceptable uses in Zone F, and would not exceed the recommended height limit.

While the proposed land uses and densities appear compatible with specific recommendations of the *Airport Land Use Compatibility Plan*, additional language should be added to the *Draft SRSP* regarding buyer notification, activities and uses hazardous to flight, and building height limits. As required by State law, the project shall be referred to the Airport Land Use Commission for determination of consistency with the *Airport Land Use Compatibility Plan* prior to project approval by the City of Napa.

Conditions of Approval POL-B: The following safety and noise policies already contained in the *Draft SRSP* shall be implemented to reduce potential airport land use compatibility conflicts:

- Policy 4.1: Avoid developing within *Airport Land Use Compatibility Plan* Zone D (with the exception of the Environmental Interpretive Center).



- Policy 4.2: Locate residential development in *Airport Land Use Compatibility Plan* Zone E.
- Policy 4.3: Locate the resort, winery and wine center in Zone F.
- Policy 5.3: Inform buyers of the proximity of the Stanly Ranch to the Napa County Airport and the potential for aircraft noise.

The following additional Conditions of Approval shall be implemented to further reduce the potential for airport land use conflicts:

- As a condition of development, notification shall be provided to buyers in all compatibility zones through one of the following methods: dedication of overflight easements or deed noticing along with real estate disclosure statements. Regardless of the chosen method, the notification shall: 1) note that the property is subject to routine overflight by aircraft at low altitudes; and 2) provide positive assurance that a prospective buyer has received this information.
- Although no proposed uses or design features which may produce hazards to aircraft flight are proposed or anticipated, the *Draft SRSP* shall contain policies to avoid the following use or design over time :  
1) glare or distracting lights which could be mistaken for airport lights;  
2) sources of dust, steam or smoke; 3) sources of electrical interference with aircraft communications or navigation; and 4) any use which may attract large flocks of birds.
- Zoning height limits shall be 35 feet or less. This is a modification to the draft development standards contained in Appendix B of the *Draft SRSP*. (LTS)

e. Significant Impacts. The following have been determined to be significant impacts.

(1) Consistency with Adopted General Plan Policies. Adoption of the *Draft SRSP* would establish new land use designations and zoning in the *Draft SRSP* area. The analysis below focuses on the proposed project's potential consistency with the land use related policies of the adopted *General Plan*. The project's relationship with land use related policies of the adopted *General Plan* is assessed in Table E-1 of Appendix E, which also includes a summary of potential inconsistencies with *General Plan* policies relating to topical areas other than land use. In cases where public policy impacts are potentially inconsistent, mitigation measures and/or General Plan amendments have been identified to achieve potential consistency.

Because the policy language found in a City's *General Plan* is often susceptible to varying interpretations, it is often quite difficult to determine, in a Draft EIR, whether a proposed project is consistent or inconsistent with such policies. Case law interpreting the Planning and Zoning Law (Gov. Code Sec 65000 et seq.) makes it clear: 1) that the meaning of such policies is to be determined by the City Council, as opposed to City Staff, EIR consultants, or members of the public; and 2) that the City Council's interpretations of such policies will prevail if they are "reasonable" even though other reasonable interpretations are also possible (See *No Oil, Inc. v. City of Los Angeles* (1987) 196 Cal. App. 3d 223, 245-246, 249.) Courts have also recognized that, because General Plans often contain numerous policies emphasizing differing legislative goals, a development project may be "consistent" with a General Plan, taken as a whole, even though the project appears to be inconsistent with some such policies (*Sequoyah Hills Homeowners Association v. City of Oakland* (1993) 23 Cal App. 4th 704, 719). Furthermore, courts strive to "reconcile" or "harmonize" seemingly disparate General Plan policies (*No Oil*, supra, 196 Cal. App. 3d at p. 244). Thus, for example, where a General Plan land use map or diagram permits certain land uses, it is unlikely that generic textual policies favoring open space preservation would be seen as overriding the map or diagram designation.

In light of these considerations, the discussions in the tables of Appendix E represent the best attempt of City Staff and the City's EIR consultant to advise the City Council as to whether the proposed project is consistent with identified goals and policies of the adopted and draft General Plans. The public should recognize that the opinions expressed below and in the tables of Appendix E are in no way binding on the City Council.

**Impact POL-1: Implementation of the *Draft SRSP* could conflict with policies of the adopted *General Plan* related to the following topics: adequacy of urban services; level of service standards for transportation impacts; street standards; location of residential development near urban services and transit; park fees; agricultural/urban conflicts; and scenic resources (see Table E-1 in Appendix E for more detail). (S)**

Mitigation Measure POL-1a: The applicant shall implement mitigation measures identified in Sections IV.C, IV.J, IV.K: Transportation, Public Services, and Public Utilities of the EIR. These measures would reduce impacts on service providers and infrastructure.

Mitigation Measure POL-1b: Should the *Draft SRSP* be approved prior to adoption of the *Draft General Plan*, the *Draft SRSP* General Plan Amendment shall specify use of the Congestion Management Plan standards and *Draft General Plan* policy T2.2 for SR 12/121 and 29/12, and *Draft General Plan* standards for City streets significantly affected by the proposed

project. Policy T2.2 ensures that development meets LOS standards unless findings are made that achieving other specific public goals in the *General Plan* outweigh this requirement.

Mitigation Measure POL-1c: The *Draft SRSP* General Plan Amendment shall include proposed street standards for the Stanly Ranch.

Mitigation Measure POL-1d: Through the Development Agreement, the applicant and City shall investigate means of providing more on-site commercial uses within the proposed wine center to meet everyday needs such as dry cleaning, banking, and grocery facilities for residents and employees.

Mitigation Measure POL-1e: Should the *Draft SRSP* be adopted prior to adoption of the *Draft General Plan*, the *Draft SRSP* General Plan Amendment shall include an exception to Policy B7b to permit mixed-use projects where substantial traffic reduction programs and urban services are provided on-site.

Mitigation Measure POL-1f: Should the *Draft SRSP* be adopted prior to adoption of the *Draft General Plan*, the *Draft SRSP* General Plan Amendment shall modify Policy PR 1.12 to permit credits to be given for the provision of private recreational facilities.

Mitigation Measure POL-1g: The applicant shall implement Mitigation Measure LU-1, which addresses impacts related to agricultural/urban conflicts.

Mitigation Measure POL-1h: On Home Hill (Neighborhood 2), the applicant shall eliminate the easternmost six townhomes and the proposed easternmost row of homes to the second cul-de-sac/circle (approximately 36 lots). At the earliest possible time as part of Phase 1, the applicant shall replant this area with a new tree grove comprised of native and ornamental tree species, including evergreens of sufficient height to screen two-story homes within five years of planting. (LTS)

(2) Consistency with *Draft General Plan*. Although the City's *General Plan* update process is not yet complete and the *Draft General Plan* has not been adopted (as of the time of publishing this Draft EIR), the *Draft General Plan* contains citywide policies and standards, some of which would be applicable to the proposed project, should it be adopted prior to the *Draft SRSP*. The *Draft General Plan Policy Document* initially identified types of uses and intensity for the *Draft SRSP* area, but the City Planning Commission in June, 1998, recommended that the



“Study Area” designation be retained until review of the *Draft SRSP*. The *Draft SRSP* and EIR are to provide sufficient information necessary to determine appropriate General Plan land use designations.

The project’s relationship with land use-related goals, policies and programs contained in the *Draft General Plan* is assessed in Table E-2 of Appendix E. Given that the City Council could conceivably modify the Planning Commission recommendation and reinstate the 1996 land use designations for Stanly Ranch, the EIR consultant has retained the analysis of the project’s consistency with the 1996 *Draft General Plan Policy Document* Stanly Ranch land use information in Table E-2 for reference purposes. An assessment of policies relating to topical areas other than land use is also included in Table E-2. In cases where public policy impacts are potentially inconsistent, mitigation measures and/or General Plan amendments have been identified to achieve potential consistency. The following text summarizes potential inconsistencies with policies.

**Impact POL-2: Implementation of the *Draft SRSP* could conflict with policies of the City’s *Draft General Plan* related to the following topics: multi-family residential density provisions; minimization of urban/rural conflicts; application of hillside standards; minimization of the need for new public facilities; provision of on-site, everyday commercial services (i.e., banking, childcare, dry cleaning); and street standards (see Table E-2 in Appendix E for more detail). (S)**

Mitigation Measure POL-2a: The *Draft SRSP* (p. 13) shall be corrected prior to adoption to refer to Figure 5 as the *Draft SRSP* Land Use Plan, not the land use designations identified by the *Draft General Plan* for the project site. (If the *Draft SRSP* is approved, this map with any changes approved by the City Council would become the General Plan land use plan for the Stanly Ranch.)

Mitigation Measure POL-2b: The *Draft SRSP* General Plan amendment shall include an exception to *Draft Policy Document* Multi-Family Residential (MFR) language to permit densities greater than 15 units per acre on the Stanly Ranch where such units are low-income housing.

Mitigation Measure POL-2c: The *Draft SRSP* Appendix B (Land Use and Development Standards and Zoning) shall be amended to incorporate and apply the provisions of Section 17.60.090 of the Zoning Ordinance regarding agricultural buffers for residential and resort units within 300 feet of the RUL, as also recommended in the Mitigation Measure LU-1.

Mitigation Measure POL-2d: Residential units within 15 percent (+) slope areas of Home Hill (Neighborhood 2), and development on Cistern Hill shall

comply with use permit, grading, Hillside Design Guidelines, and alternative development standards of the Hillside Overlay District.

Mitigation Measure POL-2e: Through the Development Agreement, the applicant and City shall investigate means of providing more on-site commercial uses within the proposed wine center to meet everyday needs such as dry cleaning, banking, and grocery facilities for residents and employees.

Mitigation Measure POL-2f: The Stanly Ranch General Plan amendment shall include street standards for the proposed project. (LTS)

(3) Consistency of Proposed Zoning and Development Standards with Draft SRSP. The *Draft SRSP* proposes an amendment of the zoning map (rezoning) from Planned Community (P-C) and Planned Community/Flood Plain (P-C:FP) to Specific Plan District (SP 97-050). Appendix B of the *Draft SRSP* describes draft zoning districts along with uses and development standards for each district. The draft districts and uses have been revised over the past few months per the description in this section. As zoning implements and must be consistent with the *General Plan* and Specific Plans, any changes to the *Draft SRSP* may lead to added zoning revisions. Sections 17.86.040 through 17.86.070 of the City of Napa zoning ordinance establish procedural requirements for the amendment of the zoning map and text. In summary, these provisions require that:

- The Planning Commission hold a public hearing on all proposed amendments and make a recommendation to the City Council where a public hearing shall also be held prior to a final decision by the City Council. The Planning Commission may recommend the approval, modified approval or denial of the proposed amendment.
- The Planning Commission and City Council shall consider the consistency of the proposed amendment with the goals, policies and programs of the *General Plan*, adopted Specific Plan (where applicable) and other existing City policies.

The *Draft SRSP* Illustrative Site Plan (see Figure III-4) is generally consistent with the proposed zoning and development regulations set forth in Appendix B. However, as identified in Impact POL-2, the proposed zoning and development regulations provided in Appendix B should be modified to be consistent with both *Draft General Plan* and *Draft SRSP* policies intended to minimize urban/rural conflicts at the RUL line. Additionally, several minor internal inconsistencies should be corrected as identified in the discussion below. The project's conformance with the *Draft SRSP*'s Design Guidelines is addressed in Section IV.H, Visual Quality, of this chapter.

**Impact POL-3: Appendix B of the *Draft SRSP* sets forth regulations that are potentially inconsistent with Land Use Policy 1.5 of the *Draft SRSP*, and that may conflict with the existing Hillside Overlay District. (S)**

(a) *Potential Inconsistency with Land Use Policy 1.5.* The *Draft SRSP* land use Objective , Policy 1.5 reads "provide for an 80-foot agricultural setback along the west side of the ranch", and the Illustrative Site Plan (see Figure III-4) appears to incorporate this setback. However, the proposed zoning has not applied this 80-foot building setback to all residential and resort unit structures along the west side of the ranch. To be consistent with the policy, Section 16.60.090 shall be applied to the residential and resort areas as described in IV.A, Impact LU-1.

(b) *Applicability of Hillside Overlay District.* Given that Cistern Hill and Home Hill have 17 acres of slopes that exceed 15 percent, some of which include proposed development (see Figures III-4 and IV.B-1 for proposed land uses and the locations of the two hills), the proposed zoning should apply the :HS Hillside Overlay District zoning to these areas, except that residential density regulations have been pre-adjusted to comply with hillside standards, and Section 17.54.030C and corresponding sections in the Hillside Development Guidelines shall not apply. In the case of Stanly Ranch, overall development proposed is well below the amount of development which would be permitted if densities typical of single-family land use designations were applied to the site. Only about 17 acres of the 900+-acre site has slopes over 15 percent, and development is clustered to avoid much of this area. Thus, densities have been "preadjusted" to account for limited hillside constraints. The :HS zoning also requires use permits for proposed dwellings, alternate development standards such as lower heights, and use of the hillside design guidelines related to grading.

Mitigation Measure POL 3: Implementation of the following modifications and corrections to the proposed zoning and development regulations set forth in Appendix B of the *Draft SRSP* would reduce this impact to a less-than-significant level:

- The *Draft SRSP* Appendix B (Land Use and Development Standards and Zoning) shall be revised to incorporate and apply the provisions of Section 17.60.090 of the Zoning Ordinance regarding agricultural buffers for homes and resort units within 300 feet of the RUL in the proposed SP Zone 2 Residential District and the SP Zone 1 Resort District as described in more detail in Section IV.A, LU-1.
- Residential units within 15 percent (+) slope areas of Home Hill (Neighborhood 2), and development on Cistern Hill shall comply with use permit, grading, Hillside Design Guidelines, and alternative development standards of the Hillside Overlay District. (LTS)



(4) Project Relationship to the Congestion Management Program. The project's relationship to the Congestion Management Program's (CMP) policies that are relevant to the *Draft SRSP* is described below. This analysis concludes that the *Draft SRSP* would generally be consistent with CMP policies.

(a) *Traffic Level of Service (Policy 3.2).* The CMP defines LOS E as the baseline standard for the CMP network. The CMP allows a standard of LOS F if that was the condition of the segment or intersection when it was included in the CMP network.

The Traffic and Circulation section of this EIR chapter (Section IV.C) analyzes the potential project-related impacts of implementation of the *Draft SRSP* on surrounding roadway segments and intersections. This analysis applies the LOS E (or F where the road is already operating at F) standard in determining impacts to CMP network intersections and roadway segments affected by the project.

(b) *Trip Reduction Ordinance (TRO) (Policy 5.4).* The County and local jurisdictions must develop TROs within one year of CMP adoption, in accordance with CMP statute. The model TRO requires all employers, public and private, with 100 or more employees at each employment site to: appoint an employee transportation coordinator; conduct employee transportation surveys; and seek to attain an average vehicle occupancy for the employees of 1.30 by 1999. The proposed project would have an estimated 500 on-site employees.

The *Draft SRSP* in its Congestion Management Objectives and Policies includes a number of strategies to reduce the need for on and off-site vehicular trips including strategies identified in the 1995 CMP. Policies 4.1 through 4.6 include:

- provision of 54 on-site employee housing units;
- an average vehicle occupancy target of 1.30 for all employees at Stanly Ranch;
- designation of an Employee Transportation Coordinator (ETC) by the resort operator;
- employer establishment of a "carpool hotline" managed by the ETC;
- establishment of a tourist-oriented transportation center within the resort that would provide transit information and operate a shuttle service to downtown Napa and other tourist destinations;
- allow electric golf carts to circulate on private roads within the residential community; and
- provision of a convenience store within the wine center.

In addition to these strategies, the project would be designed to support alternative modes of transportation. The *Draft SRSP* proposes new public and private pedestrian and bicycle trails, as well as bicycle parking facilities. Recent added transportation measures include a proposed employee transit shuttle (Stanly Ranch TDM Program, April, 1998). Thus, the *Draft SRSP* would generally be consistent with CMP policies.





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## C. TRANSPORTATION AND CIRCULATION

■ ■ ■

The section covers transportation and circulation impacts of the proposed *Draft SRSP*, including evaluation of highway, transit, bicycle and pedestrian, and parking impacts. No impacts are projected on either rail or air services, though these forms of transportation are discussed in the “Setting” section.

<b>1. Setting</b>
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a. Major Streets and Highways. Stanly Ranch is located near the junction of State Routes (SR) 12, 29, and 121 in Napa County (see Figure IV.C-1). Major roadways include:

- SR 12/121. These two state routes are a single roadway assigned dual State Route Numbers. This portion of the highway is a two-lane highway beginning at the SR 12/29/121 junction and continuing west into Sonoma County.
- SR 29. SR 29 traverses the length of Napa County from boundaries between Lake County and Sonoma County. In the vicinity of Stanly Ranch, the highway is classified as an expressway due to the presence of a signalized intersection at SR 12/29/121. North of this intersection, the facility becomes a freeway as far north as Trancas Road. Interchanges are located at Imola Avenue, First Street and Lincoln Avenue.
- Napa-Vallejo Highway. This highway, also known as SR 221, is an extension of Silverado Trail and Soscol Avenue in the City of Napa; it merges with SR 12/29 about a mile east of the project site.
- Imola Avenue. Imola Avenue is an arterial street that serves as a continuation of SR 121. The street maintains two lanes in each direction plus a left-turn median lane as far east as Soscol Avenue, except for the two-lane bridge over the Napa River.

b. Minor Roadways. Minor roadways in the vicinity of Stanly Ranch include:

- Stanly Lane. Stanly Lane originates in the Stanly Ranch project area and continues north across SR 12/121 to an intersection with Golden Gate Drive.



Stanly Lane has one lane in each direction and is controlled by stop signs at the intersection of SR 12/121.

- Golden Gate Drive. Golden Gate Drive is a frontage road west of and parallel to SR 29, connecting Stanly Lane to Imola Avenue. It has one lane in each direction, and largely serves highway commercial uses bordering the street.
- Foster Road. Foster Road is a two-lane collector street to the west of and mostly parallel to Golden Gate Drive. It intersects both Imola Avenue and Golden Gate Drive and serves a mixture of uses.
- Old Sonoma Road. Old Sonoma Road begins north of SR 12/121, lies mostly within unincorporated Napa County, serves rural uses west of the City and urban uses within the City. It connects into the City of Napa north of and parallel to Imola Avenue. It is functionally a collector roadway with one lane in each direction.
- Cuttings Wharf Road. Cuttings Wharf Road is also a rural collector roadway serving an area west of Stanly Ranch and south of SR 12/121.
- Old Suscol Road. Old Suscol Road lies entirely within the project site.

c. Existing Traffic Service Levels. One of the major “Measures of Effectiveness” that is used in this section of the EIR is the concept of “Service Level.” Intersection level of service (LOS) is a term used to describe the quality of flow or service on the highway system in which letter grades (from A to F) are used to rate the congestion experienced by drivers. A description of the six service levels is contained in Table IV.C-1. (Note: While the City Policy is based on signalized intersections, a number of intersections evaluated in this project are controlled by stop signs. The methodology used to evaluate these unsignalized locations is based on the most recent approved procedures from the 1994 Highway Capacity Manual, Transportation Research Board, 1994). The same six service levels used for signalized intersections are used as descriptors; however, the techniques used to evaluate them are necessarily different due to the different type of control.

Existing traffic volumes in the vicinity of Stanly Ranch are documented in Figure IV.C-2 for three peak periods: AM peak hour, PM peak hour, and weekend peak hour. The volumes in Figure IV.C-2 have been used to compute existing service levels at thirteen area intersections selected for evaluation in the EIR. These intersections, listed in Table IV.C-2, have been determined to be representative of the impacts on traffic that can be expected from the Stanly Ranch project. Applying signalized and unsignalized LOS techniques to the study intersections finds over a half dozen cases where the desired minimum standard is not currently met.





#### Key to Volume Data

( 18) | ( 19) | { 37} = (AM) | (PM) | {Weekend} Left Turn Volumes  
 (1081) | (969) | {1118} = (AM) | (PM) | {Weekend} Through Traffic Volumes  
 ( 2) | ( 1) | { 1} = (AM) | (PM) | {Weekend} Right Turn Volumes

Not to Scale

Source: Dowling Associates, Inc., 1997.



## STANLEY RANCH

### SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT

Figure IV.C-2  
Existing Peak Hour Traffic Volumes

**Table IV.C-1**  
**DEFINITIONS OF LEVEL OF SERVICE**  
**FOR SIGNALIZED INTERSECTIONS**

Level of service for signalized intersections is defined in terms of delay. Delay is a measure of driver discomfort, frustration, fuel consumption, and lost travel time. Specifically, level of service criteria are stated in terms of the average stopped delay per vehicle for a 15-minute analysis period.

**LEVEL OF SERVICE "A"** – Describes operations with very low delay, i.e., less than 5.0 seconds per vehicle. This occurs when progression is extremely favorable, and most vehicles arrive during the green phase. Most vehicles do not stop at all. Cycle lengths of less than 60 seconds may also contribute to low delay.

**LEVEL OF SERVICE "B"** – Describes operations with delay in the range of 5.1 to 15.0 seconds per vehicle. This generally occurs with good progression and/or short cycle lengths. More vehicles stop than for LOS A, causing higher levels of average delay.

**LEVEL OF SERVICE "C"** – Describes operations with delay in the range of 15.1 to 25.0 seconds per vehicle. These higher delays may result from fair progression and/or longer cycle lengths. Some drivers may have to wait through more than one cycle of the signal. The number of vehicles stopping is significant at this level, although many still pass through the intersection without stopping.

**LEVEL OF SERVICE "D"** – Describes operations with delay in the range of 25.1 to 40.0 sec per vehicle. At level "D", the influence of congestion becomes more noticeable. Long delays may result from some combination of unfavorable progression, long cycle lengths, or high volume/capacity (V/C) ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.

**LEVEL OF SERVICE "E"** – Describes operations with delay in the range of 40.1 to 60.0 seconds per vehicle. This is considered to be the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences.

**LEVEL OF SERVICE "F"** – Describes operations with delay in excess of 60.0 seconds per vehicle. This is considered to be unacceptable to most drivers. This condition often occurs with over-saturation (i.e., when arrival flow rates exceed the capacity of the intersection). It may also occur at high V/C ratios below 1.00 with many individual cycle failures. Poor progression and long cycle lengths may also be major contributing causes to such delay levels.

Source: Transportation Research Board, "Highway Capacity Manual", 1994.

Using the LOS significance criteria noted above (and described in detail below as the first subsection under Impacts and Mitigation Measures), the following locations experience sub-standard levels of service during the AM, PM or weekend

These following locations operate at LOS F conditions for one or more of the analysis periods.

- Old Sonoma Road at State Routes 12/121 for the weekend peak hour
- Stanly Road at State Route 121 for the AM and PM weekday and weekend peak hours

**Table IV.C-2  
EXISTING LEVELS OF SERVICE FOR KEY INTERSECTIONS**

Intersection	AM Peak Hour			PM Peak Hour			Weekend Peak Hour		
	LOS	D/V	V/C	LOS	D/V	V/C	LOS	D/V	V/C
Old Sonoma Road & SR 12/121	C	1.3	NC	D	2.6	NC	F	3.3	NC
Cuttings Wharf Road & SR 12/121	C	0.9	NC	C	1.3	NC	D	1.8	NC
Stanly Lane & SR 12/121	F	0.5	NC	F	1.0	NC	F	2.4	NC
SR 121 at SR 29	C	15.4	0.72	C	15.1	0.87	C	17.4	0.764
SR 221 at SR 29	E	40.9	0.80	F	72.3	1.00	E	42.4	0.819
Imola & Coombs	C	21.5	0.56	E	47.0	1.02	D	26.1	0.675
Imola & Jefferson	C	19.4	0.48	C	22.0	0.64	C	21.9	0.457
Imola & SR 29 Northbound Ramps	F	4.0	NC	F	69.4	NC	E	2.3	NC
Imola & SR 29 Southbound Ramps	F	85.9	1.34	F	58.6	1.44	C	11.1	0.808
Foster Road & Golden Gate Drive	A	2.0	NC	A	1.6	NC	A	1.6	-
Imola & Golden Gate/So. Freeway Drives	C	3.6	NC	C	2.9	NC	C	4.1	NC
Imola & Foster Road	B	5.6	0.57	A	2.6	0.29	A	2.8	0.318
Foster Road & Old Sonoma Road	A	1.5	NC	B	1.9	NC	B	1.5	NC

Notes: LOS = Level of Service.  
D/V = Average Delay per Vehicle in Seconds  
V/C = Volume/Capacity Ratio  
NC = V/C Not Computed for Two-Way Stop-Controlled Intersections

Source: Dowling Associates, 1998.



- State Route 221 at State Route 29 for the weekday PM peak hour
- Imola Avenue at the State Route 29 northbound ramp for the AM and PM weekday peak hours
- Imola Avenue at the State Route 29 southbound ramp for the AM and PM weekday peak hours

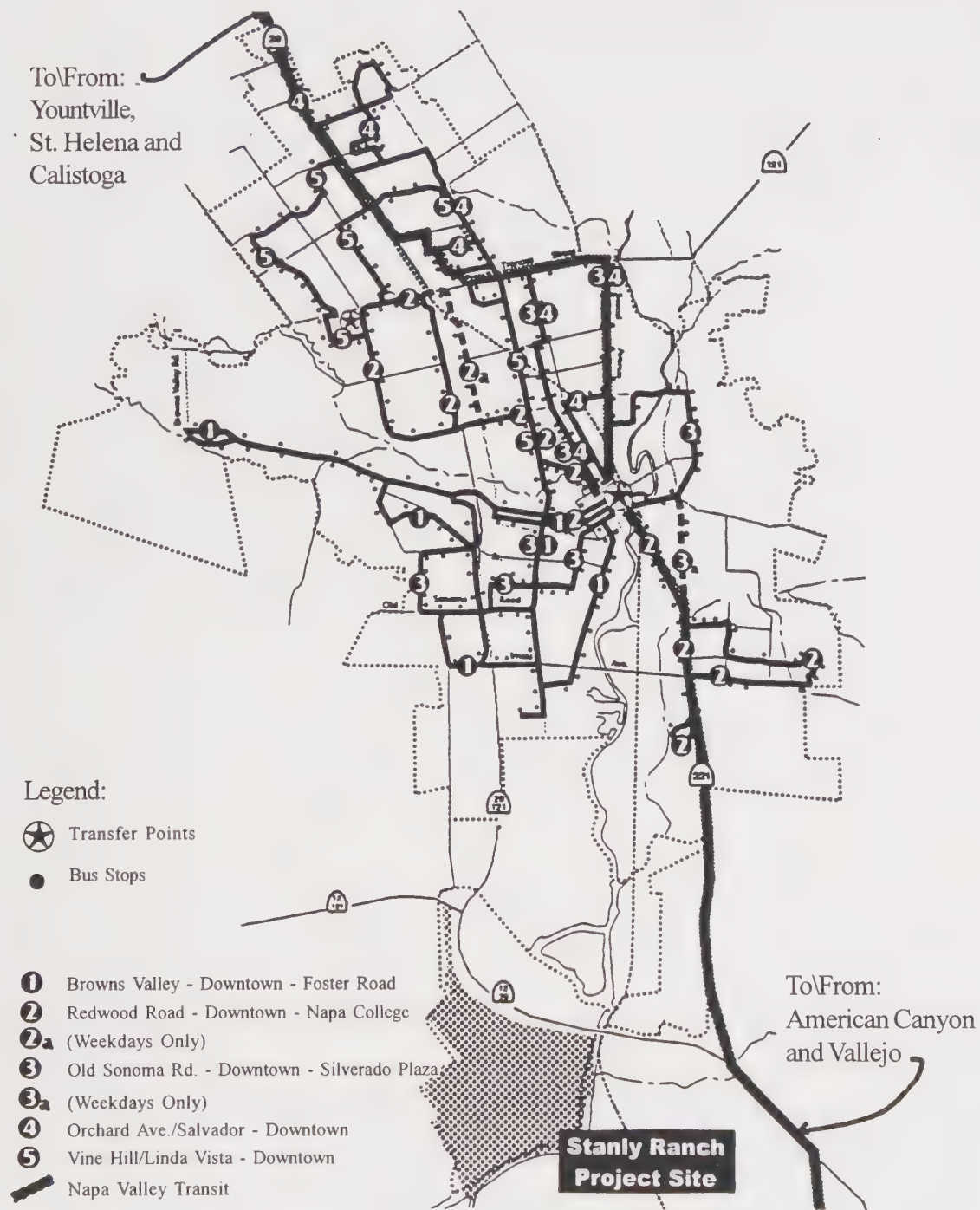
These conditions represent existing deficiencies that are not required to be mitigated by the project.

d. Public Transit. Public transit in the City of Napa is provided by the City of Napa through its "Valley Intra-city Neighborhood Express (VINE)" service. The system serves most of the major travel generators within the City. A diagram of these existing services, taken from the *City of Napa Draft General Plan*, is shown in Figure IV.C-3. At the present time, service is provided at 30-minute intervals Monday through Friday on Routes 1, 2, and 3; 60-minute interval service is provided weekdays on Routes 4 and 5. Sixty-minute (60) interval service is provided on all routes on Saturday; there is no Sunday service. Weekday service hours are from approximately 6:45 AM to 6:30 PM. Saturday service begins at 7:45 AM.

At the present time, none of the five transit routes provides service to the Stanly Ranch area. The closest route at the present time is Route 1, which passes through the intersection of Foster Road and Imola Avenue approximately one mile north of the project site entrance. The closest major bus transfer area is at Napa Valley College.

Napa Valley Transit, administered by the City, also provides fixed-route transit service in Napa County. The single route for this service, as shown in Figure IV.C-3, passes through the central portion of the City of Napa. Leaving the City in the southbound direction, it follows the Napa-Sonoma Highway (SR 221) and then continues south on SR 29 to American Canyon. At present, there are no stops in the vicinity of the project site.

e. Bicycle Routes. The City of Napa *General Plan* includes a bicycle plan covering existing City limits. The most recent version of the bicycle plan is also contained within the *Draft General Plan* (City of Napa, 1996). The bicycle plan shows a Class II bike lane for Foster Road and a Class III bicycle lane is proposed on Golden Gate Avenue as far south as the Napa City limits. The Countywide Congestion Management Agency (CMA) Bicycle Plan identifies Golden Gate Avenue, SR 12/121, SR 29/12, and Cuttings Wharf Road as Class III bike routes. Figure IV.C-4 shows the City of Napa Bikeways system.



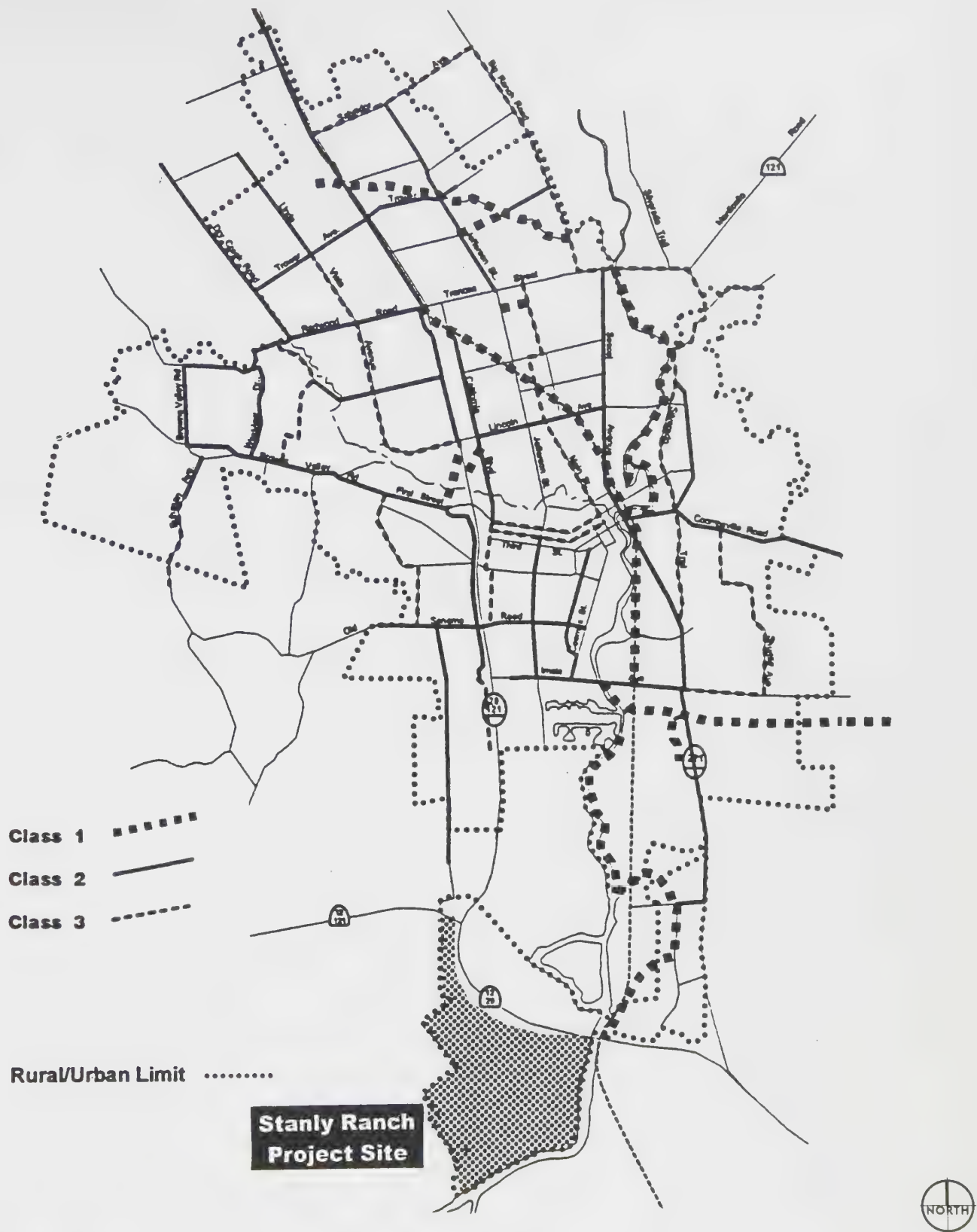
Source: Napa County General Plan 1996.



# STANLY RANCH

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Figure IV.C-3  
Transit Service Coverage



SOURCE: CITY OF NAPA DRAFT GENERAL PLAN 1996

# **S T A N L Y   R A N C H** SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT

Figure IV. C-4  
City of Napa Future Bikeway System



Additionally, the Citywide Trails Plan proposes a multi-use River Trail segment at the project site and a Bay Trail pedestrian/bicycle link on Golden Gate Avenue south to Stanly Lane, then south on Stanly Lane to Old Suscol Road where it heads west to Cuttings Wharf Road. The City's Bay Trail route through Stanly Ranch provides a logical connection to regional Bay Trail routes at Imola Avenue to the north and Cuttings Wharf Road to the west of the site.

The Bay Trail is a partially constructed, regional hiking and bicycling trail system which is planned to ultimately connect more than 90 parks and publicly accessible open space areas around the perimeter of San Francisco and San Pablo Bays. Planning for the Bay Trail is carried out by the Association of Bay Area Governments (ABAG) as part of a State-sponsored program. Development is in cooperation with individual public agencies in whose jurisdiction the trail alignment is located.

Trails are further discussed below and in the following locations: Chapter III, Project Description; Chapter IV.J, Public Services; Chapter IV.F, Biological Resources; and Appendix D).

(1) Other Forms of Transportation. The Napa County Airport is located less than a mile south of the proposed project (about five miles by road). This is a general aviation airport with no regularly scheduled commercial flights. The nearest airport for commercial flights is in Oakland, approximately 45 miles south of the project site.

Two railroads operate within a few miles of the project site. The "Napa Valley Wine Train" originates from a depot on McKinstry Street in Downtown Napa. Lunch and dinner trains currently operate three times per day every day. The "California Northern Railroad" operates freight service on a line that begins at the southern end of the Wine Train jurisdiction and continues south to Vallejo, east to Fairfield and west to Schellville. One train in each direction per day is operated.

## **2. Impacts and Mitigation Measures**

### **a. Project Circulation Components**

(1) Description of Transportation-Related Components of the Stanly Ranch Project. The *Draft SRSP* includes a number of transportation-related components that should be understood as a basis for the evaluation of possible environmental impacts. Chapter III, Project Description, provides a more complete description of individual improvements. Many of these components have been included in the project at the request of the City as a means of mitigating potential

impacts. When additional measures are needed to mitigate potential impacts, these measures have been numbered to correspond to the specific impact.

(2) On-Site Vehicle Circulation. The proposed vehicular circulation plan for the project is shown in Figure III-15. Stanly Lane would provide access into the site from SR 12/121; Old Suscol Road would provide access to the resort and residential neighborhoods. The plan also includes several neighborhood streets and a resort area loop street.

Stanly Lane would be a public four lane road to the entrance to the winery and wine center, then narrow to a private two lane road south of the winery. Other streets would be private, two lane streets. An emergency access road would connect to Cuttings Wharf Road and be designed for emergency use only.

Emergency vehicle access (EVA) would be provided within the project in a number of ways: on the project's main streets, on portions of the separated Bay Trail pedestrian/bicycle path, on designated EVA-only connections between neighborhoods and to Cuttings Wharf Road.

(3) Off-Site Vehicular Circulation. Off-site traffic improvements proposed as part of the project include signalization of the Stanly Lane and SR 12/121 intersection and related widening of SR 12/121. Widening would be needed for a distance of up to 1,500 feet between SR 29 and Stanly Lane to accommodate an added westbound turn lane on SR 12/121 to Stanly Lane.

(4) Transportation Demand Management. The project applicant has prepared a Preliminary Transportation Demand Management (TDM) Plan for Stanly Ranch as part of the project description. The plan includes the following eight elements:

- *Provision of on-site housing opportunities for the employees of Stanly Ranch.*
- *Provision of on-site convenience services.*
- *Provision of an integrated bicycle system.* The plan includes a private pedestrian and bicycle network to connect the residential neighborhoods to each other, to the golf clubhouse, and to the resort. In addition, two public trails are proposed as described in the Project Description section and summarized below.
- *Provision of a Transportation Center as part of the resort complex.* This center would be a source of information about transportation services available in the area.
- *Provision of resort shuttles to downtown Napa and other area attractions.* The TDM plan proposes to provide a scheduled resort shuttle service between

Stanly Ranch and downtown Napa and/or other destinations within Napa Valley. It would also provide the opportunity to connect to existing transit providers (Napa Valley Transit and the VINE services).

- *Provision for connections with existing transit services.* The TDM plan proposes providing a shuttle connection to regional airports and other Napa connections, to be determined over time. This is expected to include employee shuttles.
- *Use of golf carts for travel within Stanly Ranch.* The TDM plan proposes making golf carts available for both visitors and residents for travel within the project site.
- *Provision of ridesharing/transit information.* The TDM plan proposes to designate an employee of the resort as an "Employee Transportation Coordinator" to monitor commuting activity and to provide information about carpooling and other ridesharing opportunities.
- *Provision of incentives to promote carpooling and transit.* Include preferential parking, a guaranteed ride home for employees required to stay late and discounted bus passes.

(5) Pedestrian and Bicycle Trails. To help implement the City bicycle/trail plans, the *Draft SRSP* proposes to dedicate and construct a Class 1 separated 2.1-mile multi-use Bay Trail through the site which connects to the designated bicycle routes on Golden Gate Drive north of the site and Cuttings Wharf Road west of the site (see Figure IV.C-4).

Additionally, the project proposes to dedicate and construct a segment of the City's planned River Trail (Figure III-16). This trail would extend along Stanly Lane from Old Suscol Road to an employee/public parking lot and continue to the river and a set of loop trails near the Highway 29 bridge. A future southerly loop would also be offered for dedication.

b. Criteria of Significance. In this EIR, the only potential impacts for which quantitative criteria of significance have been developed are impacts to the street and highway system. The significance of all other impacts is determined on the basis of non-quantitative measures. The impacts to the street and highway system are determined through an evaluation of LOS at thirteen critical intersections in the vicinity of the project. These intersections were selected as being inclusive of all locations where the project might induce a significant impact. Other locations were determined to be unlikely targets of significant project impacts; text below substantiates this conclusion. The analysis intersections include:



- Old Sonoma Road & State Route 12/121
- Cuttings Wharf Road & State Route 12/121
- Stanly Lane & State Route 12/121
- State Route 12/121 at State Route 29
- State Route 221 at State Route 29
- Imola Avenue & Coombs Avenue
- Imola Avenue & Jefferson Street
- Imola Avenue (SR 121) & State Route 29 Northbound Ramps
- Imola Avenue & State Route 29 Southbound Ramps
- Foster Road & Golden Gate Drive
- Imola Avenue & Golden Gate/South Freeway Drives
- Imola Avenue & Foster Road
- Foster Road & Old Sonoma Road

As discussed in the Environmental Setting section above, LOS is evaluated by the City of Napa in accordance with the methodologies included in the 1994 Highway Capacity Manual (HCM) from the National Transportation Research Board. This is a standard process used by most, if not all, professionals involved in the evaluation of traffic impacts. The six service levels (i.e., A through F) are described above in Table IV.C-1.

The City of Napa is updating its *General Plan*, and in that process, will be updating and changing its service level methodology and LOS standards. The adopted *General Plan* establishes “Mid-Level C” as its LOS standard, and the methodology is not clearly defined. The *Draft General Plan (Draft Policy Document)* proposes mid-range Level D as the standard for acceptability at signalized intersections on City arterial and collector streets except for specific areas of the City where LOS E will be considered acceptable: specifically, this standard would apply to downtown Napa within the area bounded by Soscol Avenue, First Street, California and Third Street, and on Jefferson Street between Third Street and Old Sonoma Road.

- Mid-range LOS D is defined by the average delay at an intersection exceeding 32.55 seconds per vehicle.
- The *Draft Policy Document* also proposes mid-range LOS E as the standard for stop-controlled (unsignalized) intersections; in this case, mid-range LOS E is defined as a reserve capacity of 49.5 vehicles per hour or greater.
- For State highways and freeways, the governing standard is that of the Napa CMA, which applies LOS E as the standard unless the existing condition is already LOS F.

For the purposes of this EIR, the standards of significance shown in Table IV.C-3 are used. The use of these standards is consistent with the *Draft General Plan* and

**Table IV.C-3  
SUMMARY OF SIGNIFICANCE CRITERIA**

Existing Condition LOS Or Cumulative Condition LOS	Resultant LOS When Project Traffic is Added	Resultant Condition is Considered Significant
LOS E or better on State Routes or at State Controlled intersections	LOS F	Significant – subject to mitigation.
Mid-range LOS D or better at City signalized intersections	Below mid-range LOS D	Significant – subject to mitigation.
Mid-range LOS E or better for City stop controlled intersections.	Below mid-range LOS E	Significant – subject to mitigation.
LOS E for City signalized intersections	LOS F	Significant – subject to mitigation
LOS F	LOS F	Significant if the project adds 10 percent to the base volume/capacity ratio. <sup>a</sup>

- <sup>a</sup> This criterion is proposed to be based on volume/capacity ratio rather than on average delay (the delay criterion is described in Table IV.C-1). The reason for this change in computation method is that the equations which are used to compute average delay become very unstable when the LOS exceeds E. The equations were originally designed to be applied in operational conditions where, in practice, conditions exceeding LOS E were not intended to occur. Using the volume/capacity ratio under conditions of LOS F would, in the opinion of the EIR's traffic consultant, provide a more rational analytic framework for decision-making. The 10 percent criterion was selected because it is consistent with the Circular 212 Planning method which also uses volume/capacity ratios in its standards; in the Circular 212 Planning Method, LOS A, B, C, D, and E are defined as being separated by 10 percent. It would appear logical to use the same range criterion for conditions in LOS F.

CMA standards. Should the *Draft SRSP* be approved prior to adoption of the *Draft General Plan*, the *Draft SRSP* General Plan Amendment shall specify use of the *Draft General Plan*/CMA standards as described in the Public Policy section.

For the purposes of this EIR, the *Draft SRSP* would also result in significant impacts if it would result in the following:

- Creation of unsafe conditions for pedestrians or bicyclists;
- Inadequate circulation on-site for projected vehicular traffic;
- Inadequate emergency vehicle access or inadequate communication of emergency evacuation routes to site visitors;
- Inadequate on-site parking supply suitably located to serve the anticipated parking demand;
- Short-term construction impacts to existing traffic on SR 12, 121, and/or 29.

c. Methodology, Trips Generated, and LOS Forecasts. The following section discusses the methodology, assumptions, vehicular trips generated and their effect on intersection LOS. Determination of impacts and their significance is provided in the following subsections (beginning on page IV.C-37).

(1) Trip Generation. Trip generation for this project is based on the table prepared by Korve Engineering, Inc. (Korve) on June 24, 1997 (under contract to the project applicant) and is shown as Tables IV.C-4 through IV.C-6. Dowling Associates (under contract to the City) has reviewed the assumptions by Korve and determined that they fall within the standard industry guidelines. In the work that Dowling Associates has done for the EIR, total trips generated as shown on these tables have been used directly in the travel forecasting.

(2) Trip Distribution. The Napa County travel forecasting model contains data for the PM peak hour only. Therefore, trip distribution for the *Draft SRSP* has been developed in several steps to derive values for the three peak periods investigated in this EIR. For the PM peak period, the travel forecasting model with year 2010 Countywide land use data and transportation network was used, along with all traffic generated by the project at the Stanly Ranch/SR 12/121 intersection.

A select-zone assignment process was then employed to determine the distribution of these trips to the network. An assumption was made that the AM peak hour distribution would be the inverse of the PM distribution. Finally, the weekend distribution is a combination of data derived from this process with a separate estimate of weekend distribution made previously by Korve Engineering. Table IV.C-7 documents these trip distribution assumptions. These percentages are applied to all project traffic that would enter and leave the project site. For example, in the AM peak hour, 9 percent of Stanly Ranch would depart to SR 12/121 going west while 15 percent would arrive from the west.

(3) Selection of Locations for Analysis of Impacts. The initial review of potential impact areas by City of Napa staff and the consultant team resulted in the identification of five intersections in the vicinity of the project as locations where the project might have potential impacts. Additional locations were identified at the scoping meeting held prior to the initiation of technical work on this EIR. The City and the consultant team reviewed estimates of additional traffic at all of these locations and ultimately settled on 13 intersections for review. The criteria for including or not including an intersection was the expectation that an increase in traffic might lead to a change in LOS as defined by the criteria of significance discussed above. Typically, when volume increases per lane drop below 50 vehicles in a peak hour, the impact on service level becomes insignificant. Figure IV.C-5 illustrates the traffic distribution from the project on the streets and highways surrounding Stanly Lane.



**Table IV.C-4**  
**WEEKDAY AM PEAK HOUR TRIP GENERATION COMPUTATIONS**

Land Use	Unit Type	Number of Units	Adjustment Factor <sup>a</sup>	Adjusted Units	Trip Generation Rates		In/Out Split		Trips		
					Daily	AM Peak Hour	In	Out	Daily	AM Peak Hour	
										In	Out
Resort Facilities and Incl: Guest Cottages Carefree Club Resort Homes Total Units	Dwelling Units	200 25 75 300	0.85	255	10.16	0.33	0.6	0.4	2591	50	34
Resort Restaurants	Seats	390	0.5	195	2.86	0.03	0.94	0.06	558	6	0
Single-Family - Residents	Dwelling Units	540		540	9.55	0.74	0.26	0.74	5157	104	296
Apartments - Employees	Dwelling Units	54		54	4.03	0.74	0.26	0.74	218	10	30
Golf Course/Club House etc	Holes	18	0.5	9	37.59	3.22	0.83	0.17	338	24	5
Wine Center	KSF <sup>b</sup>	40	0.8	32	40.57	closed	0	0	1301	0	0
Winery	Winery	1		1	80	closed	0	0	80	0	0
Total									10243	194	365

<sup>a</sup> Adjustment factors are taken from the Korve Engineering Trip Generation analysis and are as follows: 85 percent applied to the resort on the assumption that a maximum of 85 percent of the rooms would be occupied at any one time; 50 percent applied to the restaurant and golf course on assumption that 50 percent of trips would be internal to the project and not distributed onto the public roadway system; 80 percent applied to the wine center on the assumption that 20 percent of the trips would be internal and not distributed onto the public roadway system.

<sup>b</sup> KSF = thousand square feet.

**Table IV.C-5**  
**WEEKDAY PM PEAK HOUR TRIP GENERATION COMPUTATIONS**

Land Use	Unit Type	Number of Units	Adjustment Factor <sup>a</sup>	Adjusted Units	Trip Generation Rates		In/Out Split		Trips		
					Daily	PM Peak Hour	In	Out	Daily	PM Peak Hour	
										In	Out
Resort Facilities and Incl: Guest Cottages Carefree Club Resort Homes Total Units	Dwelling Units	200 25 <u>75</u> 300	0.85	255	10.16	0.48	0.37	0.63	2591	45	77
Resort Restaurants	Seats	390	0.5	195	2.86	0.23	0.7	0.3	558	31	14
Single-Family - Residents	Dwelling Units	540		540	9.55	1.01	0.65	0.35	5157	355	191
Apartments - Employees	Dwelling Units	54		54	4.03	1.01	0.65	0.35	218	35	19
Golf Course/Club House etc	Holes	18	0.5	9	37.59	3.38	0.52	0.48	338	16	15
Wine Center	KSF <sup>b</sup>	40	0.8	32	40.57	4.93	0.57	0.43	1301	90	68
Winery	Winery	1		1	80	16	0.31	0.69	80	5	11
Total									10243	577	395

<sup>a</sup> Adjustment factors are taken from the Korve Engineering Trip Generation analysis and are as follows: 85 percent applied to the resort on the assumption that a maximum of 85 percent of the rooms would be occupied at any one time; 50 percent applied to the restaurant and golf course on assumption that 50 percent of trips would be internal to the project and not distributed onto the public roadway system; 80 percent applied to the wine center on the assumption that 20 percent of the trips would be internal and not distributed onto the public roadway system.

<sup>b</sup> KSF: Thousand square feet.

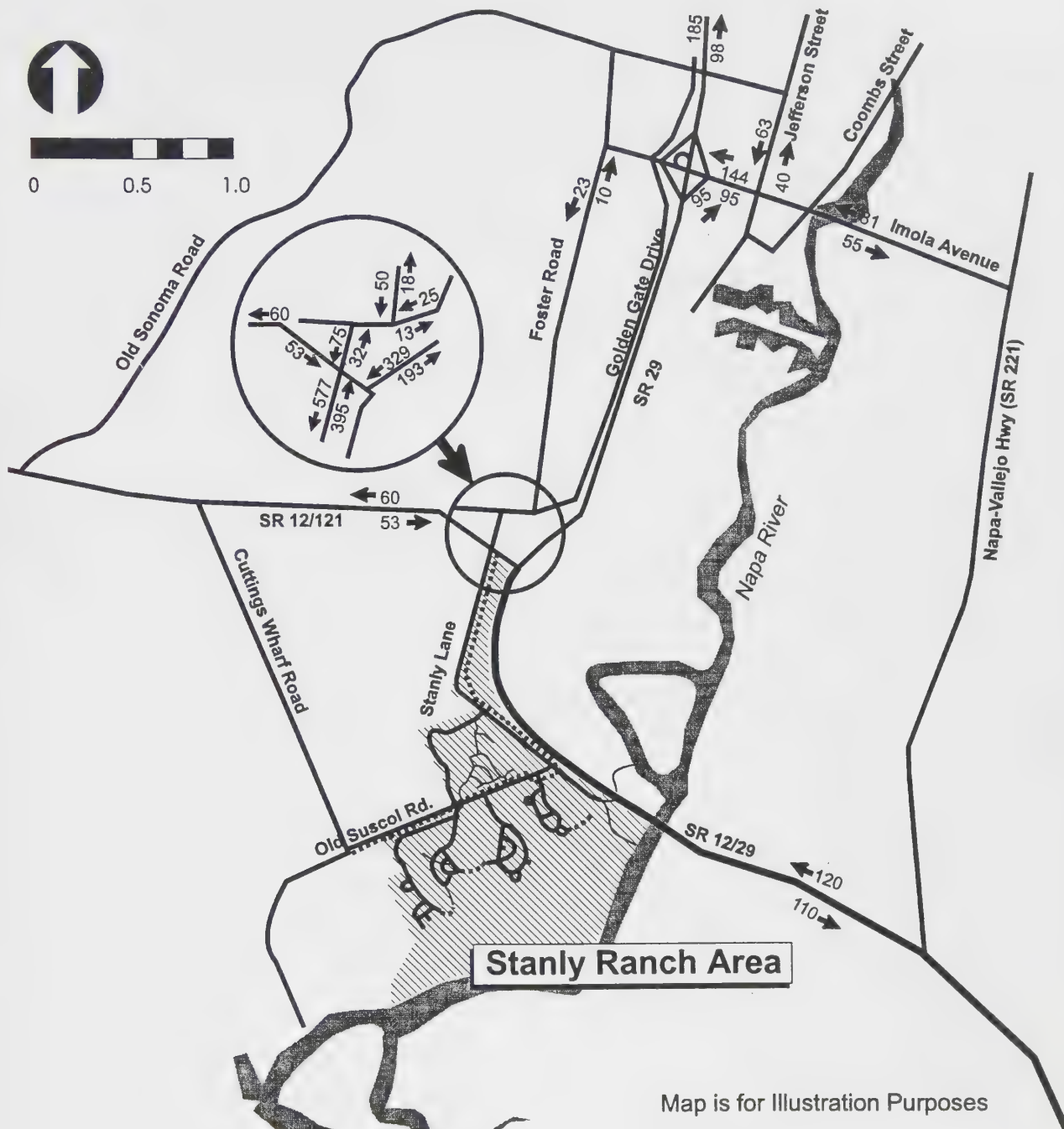
**Table IV.C-6**  
**WEEKEND PEAK HOUR TRIP GENERATION COMPUTATIONS**

Land Use	Unit Type	Number of Units	Adjustment Factor <sup>a</sup>	Adjusted Units	Trip Generation Rates		In/Out Split		Trips		
					Daily	Weekend Peak Hour	In	Out	Daily	Weekend Peak Hour	
										In	Out
Resort Facilities and Incl: Guest Cottages Carefree Club Resort Homes Total Units	Dwelling Units	200 25 <u>75</u> 300	0.85	255	11.25	0.82	0.47	0.53	2869	98	111
Resort Restaurants	Seats	390	0.5	195	2.74	0.32	0.53	0.47	534	33	29
Single -Family - Residents	Dwelling Units	540		540	10.19	0.96	0.54	0.46	5503	280	238
Apartments - Employees	Dwelling Units	54		54	3.39	0.96	0.54	0.46	183	28	24
Golf Course/Club House etc	Holes	18	0.5	9	42.43	4.6	0.72	0.28	382	30	12
Wine Center	KSF <sup>b</sup>	40	0.8	32	45.91	10.13	0.5	0.5	1469	162	162
Winery	Winery	1		1	195	39	0.5	0.5	195	20	20
Total									11135	651	596

<sup>a</sup> Adjustment factors are taken from the Korve Engineering Trip Generation analysis and are as follows: 85 percent applied to the resort on the assumption that a maximum of 85 percent of the rooms would be occupied at any one time; 50 percent applied to the restaurant and golf course on assumption that 50 percent of trips would be internal to the project and not distributed onto the public roadway system; 80 percent applied to the wine center on the assumption that 20 percent of the trips would be internal and not distributed onto the public roadway system.

<sup>b</sup> KSF: Thousand square feet.





Source: Dowling Associates, Inc., 1998.

# STANLY RANCH

## SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT

Figure IV.C-5  
Distribution of Traffic Volumes To/From Stanley Ranch PM Peak Hour

**Table IV.C-7**  
**TRIP DISTRIBUTION ASSUMPTIONS FOR**  
**STANLY RANCH PROJECT TRAFFIC<sup>a</sup>**

Origin/Destination	AM Peak Hour		PM Peak Hour		Weekend Peak Hour	
	Departing	Arriving	Departing	Arriving	Departing	Arriving
SR 12/121 to/from west of Stanly Lane	9%	15%	15%	9%	18%	27%
SR 29 to/from north of SR 12/121	57%	49%	49%	57%	55%	47%
SR 29 to/from south of SR 12/121	21%	28%	28%	21%	22%	21%
Stanly Lane north of SR 12/121	13%	8%	8%	13%	5%	5%

<sup>a</sup> Percentages shown reflect the percentage of total project traffic by time period.

Source: Dowling Associates, 1998.

The diagram shows that intersections such as Foster Road/Imola Avenue and Golden Gate Drive/Imola Avenue would have fewer than 50 additional vehicles entering an intersection in one direction. These volume levels may result in less than significant changes in service level. However, they are considered sensitive intersections and were thus maintained for evaluation in this analysis.

For these reasons, the following intersections were selected for evaluation of potential impacts:

- Stanly Lane/SR12/121
- SR 12/121/29
- SR 12/121 & Cuttings Wharf Road
- SR 12/121 & Old Sonoma Road
- SR 12/29 & SR 221 (Sonoma-Vallejo Highway)
- Imola Avenue and SR 29 NB Ramps
- Imola Avenue and SR 29 SB Ramps
- Imola Avenue and Jefferson Street
- Imola Avenue and Coombs Street
- Golden Gate Drive and Foster Road
- Golden Gate Drive and Imola Avenue
- Foster Road & Imola Avenue
- Foster Road and Old Sonoma Road

The following locations identified in the scoping session were not evaluated due to the low volume of traffic expected to be added at these locations by the project. Of the 280 peak hour vehicle trips generated by the project on SR 29 north of Imola Avenue, only 15 percent or about 42 trips are expected to use either First Street, Lincoln or Trancas to access the northern portions of the City of Napa. Because the project traffic would be spread across all three streets, these locations were removed from further consideration.

- First Street/SR 29 Interchange
- Lincoln/SR 29 Interchange
- Trancas/SR 29 Interchange

The intersection of Highway 12/29/Airport Boulevard was not evaluated due to low volume of traffic added by the project. The project will add less than 200 (or 3.5 percent) PM peak hour trips.

(4) Saturation Flow Analysis. The initial Napa CMA model contained conservative assumptions for saturation flows at the intersection of SR 12/29/121. Saturation flow is defined as the maximum uninterrupted volume that can flow past a given point and is measured in vehicles per hour. The “capacity” of an approach to a signalized intersection is always less than the saturation flow due to interruptions caused by the traffic signal. Because this input assumption to the traffic model could have significant effects on the forecasts produced by the model, and thus the improvements required for acceptable operation at the intersection, existing data were collected in the PM peak hours on July 2, 1997 at this intersection to determine the actual saturation flow rate. Table IV.C-8 shows the observed saturation flow rates for the through and left-turn lanes for each approach to the intersection; it also includes recommended rates for use by each type of lane (left and through). Because of the nature of the signal controls at the intersection, data for right-turn-lane saturation flow rates could not be collected. Since the observed flow rates for the through and left lanes ranged from 6-12 percent above the default rates used in TRAFFIX,<sup>1</sup> it was decided that the recommended saturation flow rates for right-turn lanes should be increased above the default flow rate by the average of these two, or 9 percent.

(5) Traffic Controls for these Scenarios. The traffic controls assumed in this analysis are shown in Table IV.C-9. Note that a traffic signal at the intersection of SR 12/121 and Stanly Lane is included as part of the proposed project.

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<sup>1</sup> TRAFFIX is a software program appendage to the Napa County CMA MINUTP traffic model, and it is usually used only for the intersection evaluation process.



**Table IV.C-8**  
**SUMMARY OF SR 12/29 SATURATION FLOW SURVEY - July 2, 1997**

Approach/Lane	Observed Saturation Flow Rates	Average for Approach	Recommended Saturation Flow Rates
EB Left Turn, Inside Lane	1,878		
EB Left Turn, Outside Lane	1,873	1,876	1,868
NB Left Turn - Inside Lane	1,860		
NB Left Turn - Outside Lane	1,859	1,860	1,868
NB Through - Inside Lane	2,036		
NB Through - Outside Lane	1,798	1,917	1,917
SB Through - Inside Lane	2,067		
SB Through - Outside Lane	1,643	1,855	1,917

Source: Dowling Associates, 1998.

(6) Estimate of Cumulative Growth for this Project. The original data upon which the Napa County Travel Forecasting Models are based were collected in 1992. The new turning movements upon which this study is based were collected in 1996 and 1997. A dichotomy has begun to arise in that traffic appears to be growing in this portion of Napa County in the late 1990s at a faster rate than projected by the travel forecasting model in the early 1990s. Thus, in the PM peak hour, the new *observed* counts actually exceed the *forecast* volumes for 2010 in the southbound direction; in the northbound direction, the observed volumes are almost equal to the projected 2010 volumes. It is clearly unlikely that all of the projected growth between 1992 and 2010 has already occurred; some additional growth is thus to be expected. The assumption made for this study is that the percentage rate of growth predicted by the Napa CMA model will continue from now until 2010. Thus, growth factors from 1997 (Existing) to 2010 have been derived from growth factors in the 2010 CMA model. The only change to the CMA growth factors is that they have been linearly reduced to remove the five years (1992-1997) of growth that has already occurred. The resultant traffic estimates are thus higher than would be obtained from a direct running of the Napa CMA model. However, they are believed to be a more realistic forecast than would be derived from the model by itself.

The Napa County Travel Forecasting Model does not include major changes to the existing local or regional street system. Therefore, the model can forecast future traffic along all major roadways and highways without being dependent upon the assumption that future changes in the street system are required.

**Table IV.C-9**  
**TRAFFIC CONTROLS AT STUDY INTERSECTIONS**

<b>Intersection</b>	<b>Existing Conditions</b>	<b>Existing Plus Project</b>	<b>Cumulative Conditions</b>	<b>Cumulative Plus Project</b>
Old Sonoma Road & SR 12/121	2-Way Stop	2-Way Stop	2-Way Stop	2-Way Stop
Cuttings Wharf Road & SR 12/121	2-Way Stop	2-Way Stop	2-Way Stop	2-Way Stop
Stanly Lane & SR 12/121 <sup>a</sup>	2-Way Stop	Signal	2-Way Stop	Signal
SR 121 & SR 29	Signal	Signal	Signal	Signal
SR 221 & SR 29	Signal	Signal	Signal	Signal
Imola Avenue & Coombs Street	Signal	Signal	Signal	Signal
Imola Avenue & Jefferson Street	Signal	Signal	Signal	Signal
Imola Avenue & SR 29 Northbound Ramps	2-Way Stop	2-Way Stop	2-Way Stop	2-Way Stop
Imola Avenue & SR 29 Southbound Ramps	3-Way Stop	3-Way Stop	3-Way Stop	3-Way Stop
Foster Road & Golden Gate Drive	Foster Rd. Stopped	Foster Rd. Stopped	Foster Rd. Stopped	Foster Rd. Stopped
Imola Avenue & Golden Gate/South Freeway Drives	Golden Gate and Freeway Stopped	Golden Gate and Freeway Stopped	Golden Gate and Freeway Stopped	Golden Gate and Freeway Stopped
Imola Avenue & Foster Road	3-Way Stop	3-Way Stop	3-Way Stop	3-Way Stop
Old Sonoma Road & Foster Road	2-Way Stop	2-Way Stop	2-Way Stop	2-Way Stop

<sup>a</sup> A signal at this intersection is proposed as part of the project.

Source: Dowling Associates, 1998.

(7) **Analysis Technique.** Because this analysis (to be conservative) covers three peak periods (AM Peak Hour, PM Peak Hour and Weekend Peak Hour), a slight departure has been made from the usual technique employed for analyzing a project in Napa County. In traffic analyses for other projects, the new land use has been simply inserted into the model and the model was then run for that particular project. In this case, since the model does not contain AM and Weekend data, the approach chosen was to undertake all of the trip generation and distribution for Stanly Ranch within the TRAFFIX program that is always used to evaluate LOS in Napa County. To derive Existing-Plus-Project and Cumulative-Plus-Project impacts in a consistent manner for all three peak periods, the TRAFFIX capability to add new development traffic to an existing background base has been used. The results should be quite comparable to the usual technique of using the Napa CMA model, and this technique provides consistency across all three peak periods.

(8) Results of the Forecasts. Figures IV.C-6 through IV.C-8 document the projected travel volumes for three of the four scenarios required for this EIR: Existing-Plus-Project, Cumulative (2010) and Cumulative-Plus-Project. The data for the existing scenario, shown previously as Figure IV.C-2, as noted above, are based on recent 1996-97 counts. Cumulative (2010) traffic conditions are derived from the most recent (1997) version of the Napa County Traffic Forecasting Model prepared for the Napa County CMA. This cumulative scenario analyzes Year 2010 Countywide planned land uses and existing Stanly Ranch land uses. The Cumulative-Plus-Project scenario adds in proposed Stanly Ranch land uses.

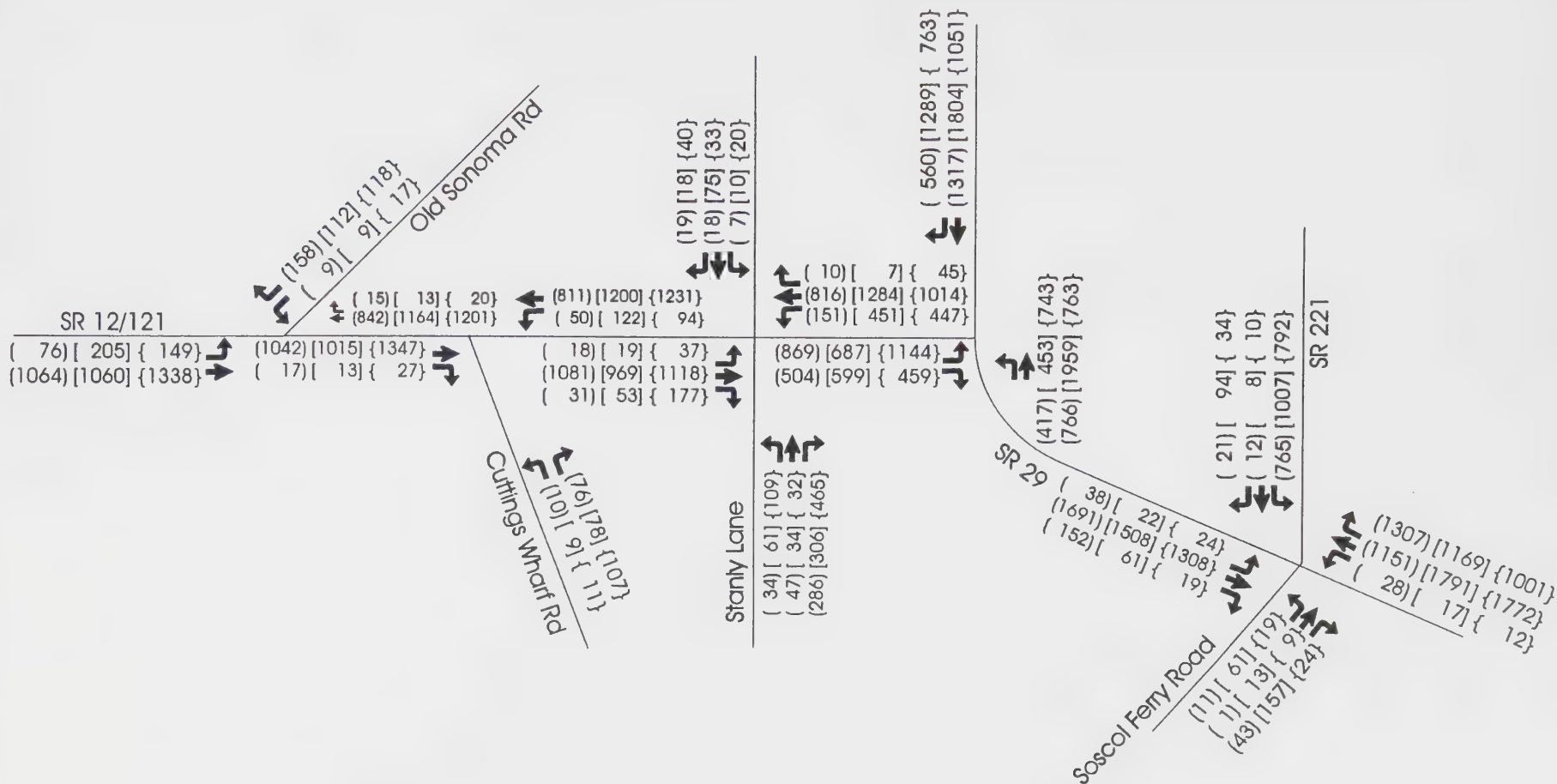
Tables IV.C-10 through IV.C-12 document the resulting LOS at the 13 intersections. The tables show a comparison for each of the peak periods, and for each of the four scenarios. The technical appendix which includes the trip generation, peak hour traffic volumes and intersection LOS calculation sheets for all of the alternatives evaluated in this EIR is available at the City of Napa.

The intersections at Old Sonoma Road/SR 12/12, SR 221/29, Imola Avenue/SR 29 southbound, Imola Avenue/Golden Gate/South Freeway Drives and Imola Avenue/Foster Road are computed to operate at Service Level F. However, in all cases where LOS F is forecast to occur when the project is included, the same condition of LOS F would occur without the project. Further, the volume/capacity ratio at these locations does not increase by 10 percent or more, which is a criterion of significance used in this EIR. Thus, in these locations, applying the significance thresholds leads to the conclusion that significant impacts cannot be attributed to the project. Improvements to these locations might be required, but they would be the responsibility of the City or the County, rather than the project.

(9) Long Range Impact on SR 12/29/121 Intersection. In the evaluation of impacts at all locations studied, an evaluation has been made of both the "Existing-Plus-Project" and "Cumulative-Plus-Project" conditions. The project applicant has stated that the project will be completed prior to 2010; thus, that year has been used for the evaluation of cumulative conditions. However, additional work (conducted in Napa County as part of the on-going development of a Napa County Deficiency Plan) indicates that the construction of any major interchange improvements needed to mitigate cumulative traffic within the SR 12/29/121 intersection would not be achievable by the year 2020 (the year for which Deficiency Planning work is being based) for financial reasons. Furthermore, the year 2020 is beyond the date when the project could be held responsible for specific impacts.

However, the City and the project applicant have determined that an evaluation should be made to determine if the proposed design of the project circulation system would have a future adverse impact on a solution to projected year 2020 congestion at the intersection of SR 12/29/121. Several designs have been developed, by

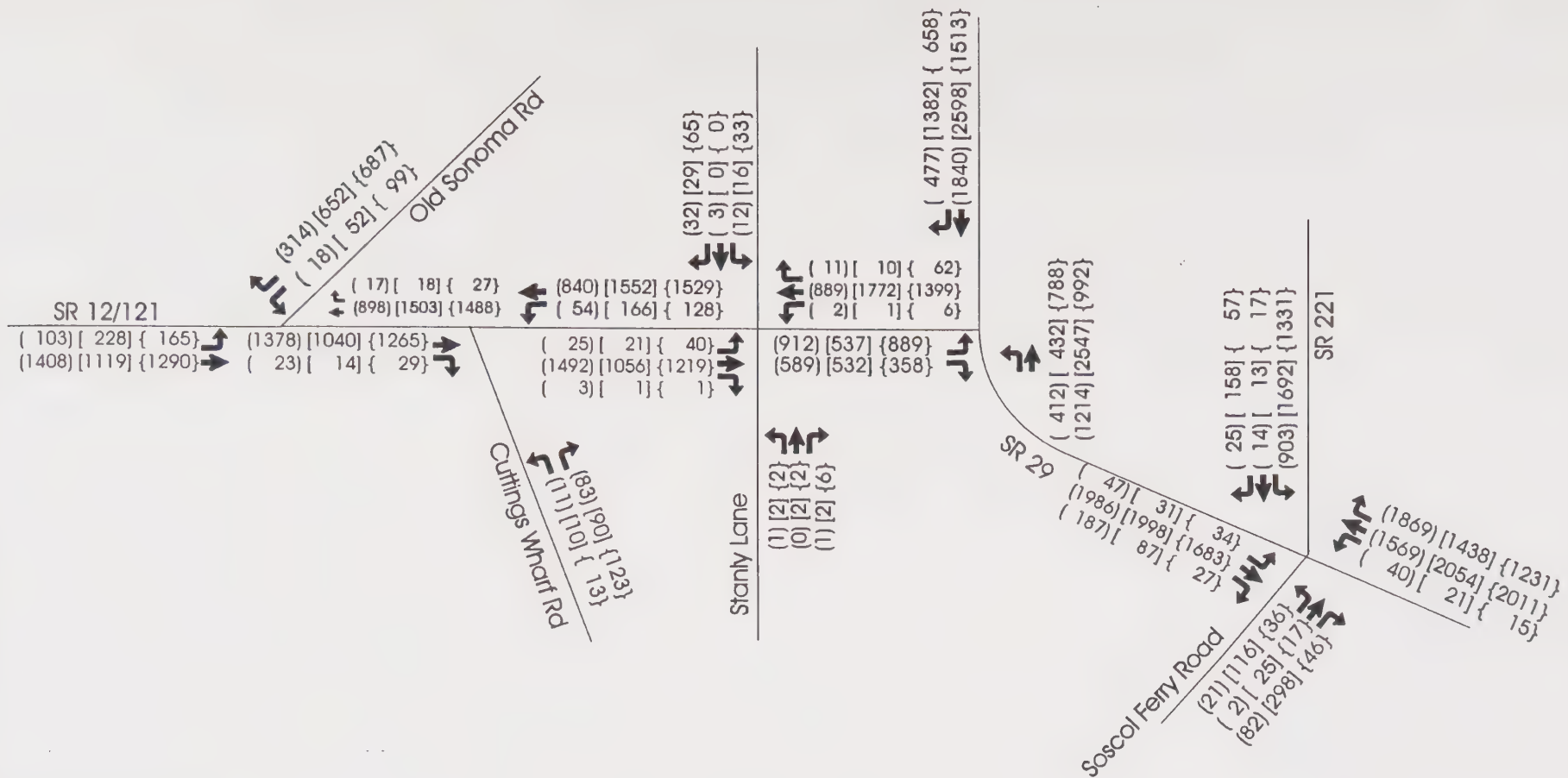




# **STANLEY RANCH** **SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT**

Figure IV.C-6  
 Projected Traffic Volumes  
 Existing-Plus-Project Conditions

BRADY ■ LSA  
 PLANNERS AND LANDSCAPE ARCHITECTS



#### Key to Volume Data

(18) [19] {37} = (AM) [PM] {Weekend} Left Turn Volumes  
 (1081) [969] {1118} = (AM) [PM] {Weekend} Through Traffic Volumes  
 (2) [1] {1} = (AM) [PM] {Weekend} Right Turn Volumes

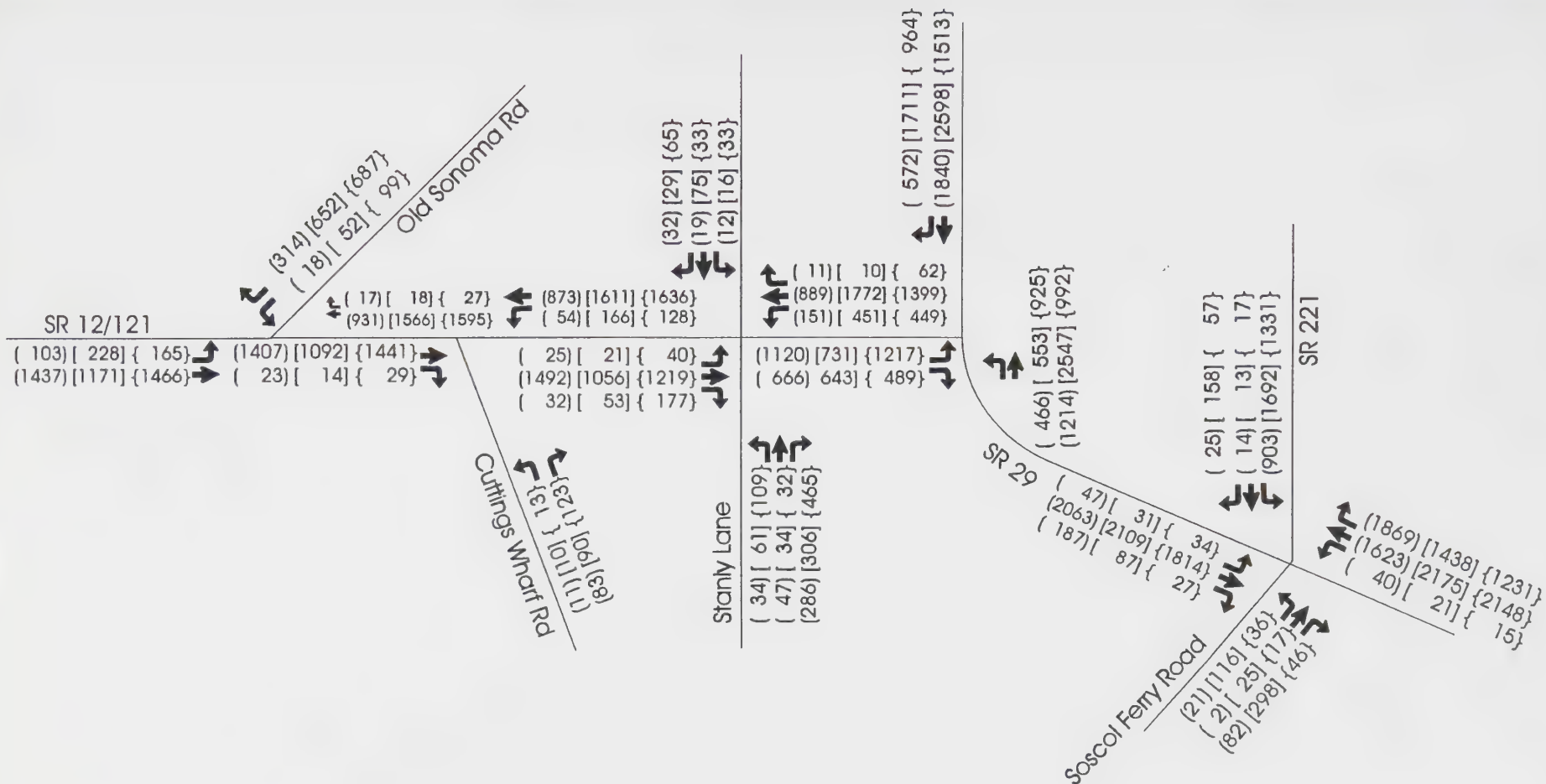
Not to Scale

Source: Dowling Associates, Inc., 1998.

## STANLEY RANCH

### SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT

Figure IV.C-7  
 Projected Traffic Volumes  
 Cumulative (2010) Conditions



#### Key to Volume Data

- ( 18) [ 19] { 37} = (AM) [PM] {Weekend} Left Turn Volumes  
 (1081) [969] {1118} = (AM) [PM] {Weekend} Through Traffic Volumes  
 ( 2) [ 1] { 1} = (AM) [PM] {Weekend} Right Turn Volumes

Not to Scale

Source: Dowling Associates, Inc., 1998.

## STANLY RANCH

### SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT

Figure IV.C-8  
 Projected Traffic Volumes  
 Cumulative-Plus-Project Conditions

BRADY ■ LSA  
 PLANNERS AND LANDSCAPE ARCHITECTS



**Table IV.C-10**  
**COMPARISON OF SERVICE LEVELS FOR THE AM PEAK HOUR**

Intersection	Existing Conditions			Existing-Plus-Project			Cumulative Conditions			Cumulative-Plus-Project		
	LOS <sup>a</sup>	D/V <sup>b</sup>	V/C <sup>c</sup>	LOS	D/V	V/C	LOS	D/V	V/C	LOS	D/V	V/C
Old Sonoma Road & SR 12/121	C	1.3	NC <sup>d</sup>	C	1.3	NC	E	4.3	NC	E	4.8	NC
Cuttings Wharf Road & SR 12/121	C	0.9	NC	C	0.9	NC	D	1.5	NC	E	1.6	NC
Stanly Lane & SR 12/121	F	0.5	NC	<i>B<sup>e</sup></i>	<i>12.6</i>	<i>0.62</i>	F	1.4	NC	<i>B<sup>e</sup></i>	<i>13.2</i>	<i>0.76</i>
SR 12/121/29	C	15.4	0.72	C	17.2	0.80	D	25.3	0.97	D	38.9	1.06
SR 221 & SR 29	E	40.9	0.80	E	42.0	0.83	F	72.9	0.98	F	82.5	1.00
Imola Avenue & Coombs Street	C	21.5	0.56	C	21.1	0.58	C	21.8	0.68	C	21.7	0.70
Imola Avenue & Jefferson Street	C	19.4	0.48	C	19.7	0.49	C	21.3	0.63	C	21.8	0.65
Imola Avenue & SR 29 Northbound Ramps	F	4.0	NC	F	4.7	NC	F	33.8	NC	F	42	NC
Imola Avenue & SR 29 Southbound Ramps	F	85.9	1.34	F	79.3	1.31	F	272.6	1.644	F	246.4	1.62
Foster Road & Golden Gate Drive	A	2.0	NC	A	1.8	NC	A	1.8	NC	A	1.7	NC
Imola Avenue & Golden Gate/South Freeway Drives	C	3.6	NC	C	3.8	NC	E	6.4	NC	E	6.8	NC
Imola Avenue & Foster Road	B	5.6	0.57	B	5.9	0.58	F	265.2	1.65	F	252.8	1.64
Foster Road & Old Sonoma Road	A	1.5	NC	A	1.6	NC	B	1.7	NC	B	1.8	NC

<sup>a</sup> LOS = Level of Service

<sup>b</sup> D/V = Average Delay per Vehicle in Seconds

<sup>c</sup> V/C = Volume/Capacity Ratio

<sup>d</sup> NC = V/C Ratio Not Computed for 2-Way Stop Sign

<sup>e</sup> LOS with project-proposed signal.

Notes: **Boldface Underlined Text** indicates adverse impact.

*Italic Text* indicates beneficial impact.

Source: Dowling Associates, 1998.

**Table IV.C-11**  
**COMPARISON OF SERVICE LEVELS FOR THE PM PEAK HOUR**

Intersection	Existing Conditions			Existing-Plus-Project			Cumulative Conditions			Cumulative-Plus-Project		
	LOS <sup>a</sup>	D/V <sup>b</sup>	V/C <sup>c</sup>	LOS	D/V	V/C	LOS	D/V	V/C	LOS	D/V	V/C
Old Sonoma Road & SR 12/121	D	2.6	NC <sup>d</sup>	E	2.9	NC	F	899.2	NC	F	>1,000	NC
Cuttings Wharf Road & SR 12/121	C	1.3	NC	D	1.4	NC	F	2.7	NC	F	3.2	NC
Stanly Lane & SR 12/121	F	1.00	NC	<i>C<sup>e</sup></i>	<i>16.4</i>	<i>0.74</i>	F	8.7	NC	<i>C<sup>e</sup></i>	<i>17.7</i>	<i>0.85</i>
SR 12/121/ 29	C	15.2	0.87	C	24.9	0.86	<b><u>E</u></b>	<b><u>54.0</u></b>	<b><u>1.15</u></b>	<b><u>F</u></b>	<b><u>&gt;1,000</u></b>	<b><u>1.14</u></b>
SR 221 & SR 29	F	72.3	1.00	F	84.4	1.04	F	579.6	1.47	F	648.4	1.50
Imola Avenue & Coombs Street	E	47.0	1.02	E	57.3	1.06	F	148.0	1.30	F	177.2	1.35
Imola Avenue & Jefferson Street	C	22.0	0.64	C	23.4	0.73	D	26.9	0.85	D	32.4	0.94
Imola Avenue & SR 29 Northbound Ramps	F	69.4	NC	<b><u>F</u></b>	<b><u>120.6</u></b>	<b><u>NC</u></b>	<b><u>F</u></b>	<b><u>285.4</u></b>	<b><u>NC</u></b>	<b><u>F</u></b>	<b><u>580</u></b>	<b><u>NC</u></b>
Imola Avenue & SR 29 Southbound Ramps	F	58.6	1.44	F	45.8	1.40	F	127.3	1.77	F	94.3	1.72
Foster Road & Golden Gate Drive	A	1.6	NC	A	1.7	NC	A	1.4	NC	A	1.5	NC
Imola Avenue & Golden Gate/South Freeway Drives	C	2.9	NC	C	3	NC	D	6.8	NC	D	7.1	NC
Imola Avenue & Foster Road	A	2.6	0.30	A	2.7	0.31	C	13.0	0.82	C	11.0	0.74
Foster Road & Old Sonoma Road	B	1.9	NC	B	2	NC	B	2.6	NC	B	2.8	NC

<sup>a</sup> LOS = Level of Service<sup>b</sup> D/V = Average Delay per Vehicle in Seconds<sup>c</sup> V/C = Volume/Capacity Ratio<sup>d</sup> NC = V/C Ratio Not Computed for 2-Way Stop Sign<sup>e</sup> LOS with project-proposed signal.Notes: **Boldface Underlined Text** indicates adverse impact.*Italic Text* indicates beneficial impact.

Source: Dowling Associates, 1998.

**Table IV.C-12**  
**COMPARISON OF SERVICE LEVELS FOR THE WEEKEND PEAK HOUR**

Intersection	Existing Conditions			Existing-Plus-Project			Cumulative Conditions			Cumulative-Plus-Project		
	LOS <sup>a</sup>	D/V <sup>b</sup>	V/C <sup>c</sup>	LOS	D/V	V/C	LOS	D/V	V/C	LOS	D/V	V/C
Old Sonoma Road & SR 12/121	F	3.3	NC	F	6	NC	F	>1,000	NC	F	>1,000	NC
Cuttings Wharf Road & SR 12/121	D	1.8	NC	<b>F</b>	<b>2.6</b>	<b>NC</b>	<b>F</b>	<b>4.9</b>	<b>NC</b>	<b>F</b>	<b>9.7</b>	<b>NC</b>
Stanly Lane & SR 12/121	F	2.4	NC	<i>C<sup>c</sup></i>	24.7	0.93	F	31.8	NC	<i>D<sup>e</sup></i>	29.4	0.98
SR 12/121/29	C	17.4	0.76	C	21.7	0.91	D	27.2	0.98	D	31.1	0.99
SR 221 & SR 29	E	42.2	0.82	E	45.7	0.86	F	181.5	1.14	F	223.5	1.18
Imola Avenue & Coombs Street	D	26.1	0.68	D	25.9	0.71	D	29.3	0.82	D	30.2	0.86
Imola Avenue & Jefferson Street	C	21.9	0.46	C	23.0	0.56	C	23.7	0.61	C	24.9	0.70
Imola Avenue & SR 29 Northbound Ramps	E	2.3	NC	E	3.0	NC	F	3.6	NC	F	5.4	NC
Imola Avenue & SR 29 Southbound Ramps	C	11.1	0.81	C	10.0	0.79	C	11.6	1.03	C	10.5	1
Foster Road & Golden Gate Drive	A	1.6	NC	A	1.6	NC	A	1.4	NC	A	1.4	NC
Imola Avenue & Golden Gate/South Freeway Drives	C	4.1	NC	C	4.3	NC	F	12.2	NC	F	13.6	NC
Imola Avenue & Foster Road	A	2.8	0.32	A	2.9	0.32	C	18.7	0.93	C	17.3	0.90
Foster Road & Old Sonoma Road	B	1.5	NC	B	1.6	NC	B	1.9	NC	B	2	NC

<sup>a</sup> LOS = Level of Service

<sup>b</sup> D/V = Average Delay per Vehicle in Seconds

<sup>c</sup> V/C = Volume/Capacity Ratio

<sup>d</sup> NC = V/C Ratio Not Computed for 2-Way Stop Sign

<sup>e</sup> LOS with project-proposed signal.

Notes: **Boldface Underlined Text** indicates adverse impact.

*Italic Text* indicates beneficial impact.

Source: Dowling Associates, 1998.

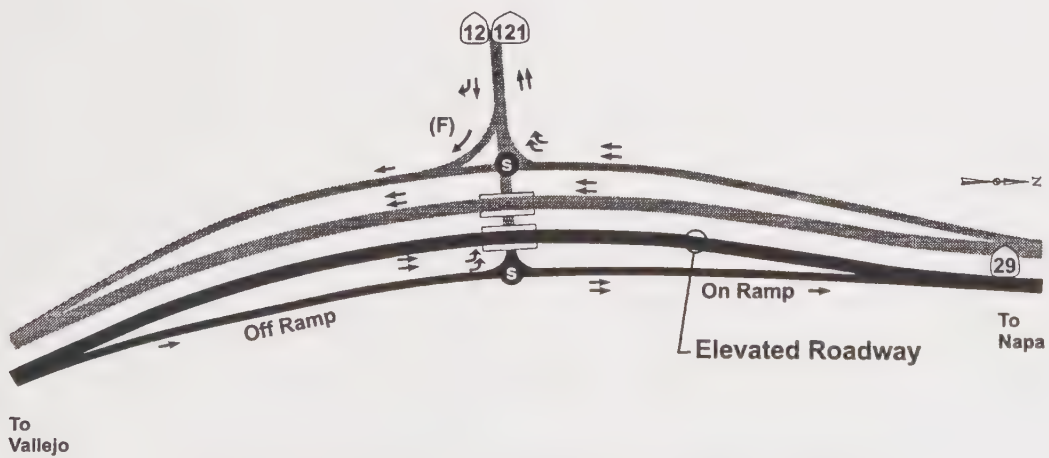
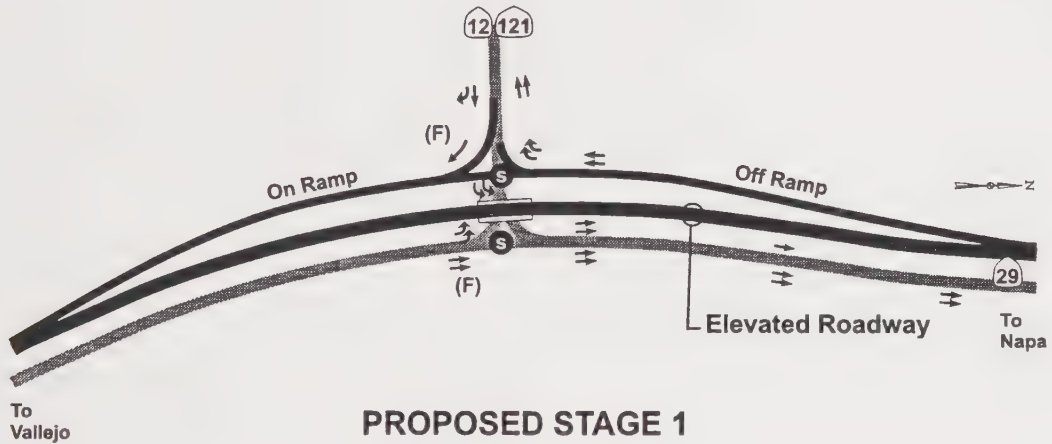
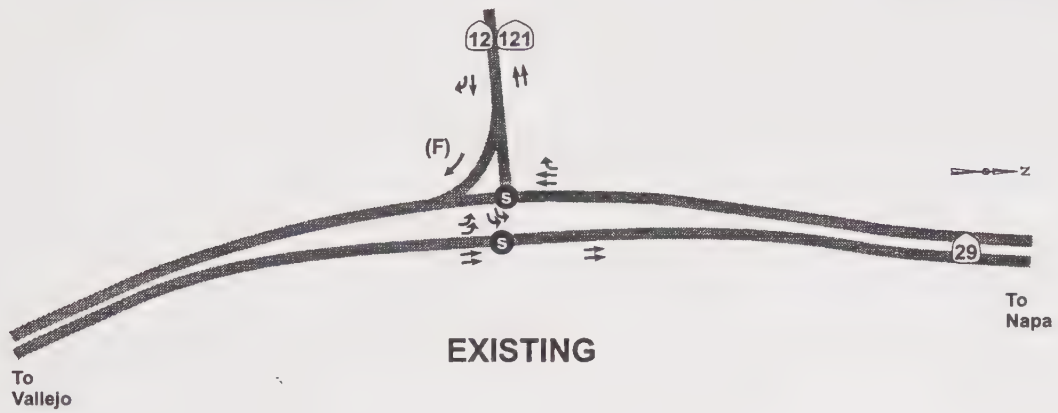


various parties, to mitigate future projected congestion at this intersection. Existing Caltrans study plans are based upon a full freeway-to-freeway interchange, with flyover ramps and all at-grade conflicts eliminated. These studies set the current right-of-way limits nearly 20 years ago. In the intervening years, SR 12/121 has been downgraded to a conventional undivided highway and scenic route, with SR 29 remaining as a freeway route. With these changes and current funding restraints, it is highly unlikely the original interchange would ever be implemented. Two more recent designs involve concepts developed as part of the as-yet-unreleased Napa County Deficiency Plan. These concepts propose a grade-separated “fly-over” ramp to carry one of two left-turn movements: either the eastbound-to-northbound left turn from SR 12/121 to SR 29; or the northbound-to-westbound left turn from SR 29 to SR 12/121. An alternative design (prepared by Korve Engineering, Inc.) which could be phased, assumes a standard diamond interchange whereby the north-south through lanes of SR 29 would be carried over SR 12/121. Turning movements between the two highways would be handled by at-grade intersections in accordance with standard diamond interchange design.

A preliminary analysis of these designs indicated that all of the options would produce an acceptable LOS for the intersection in 2020. Preliminary cost estimates indicate that the single fly-over ramp may be less costly than the entire diamond interchange design. However, the first phase of the diamond interchange would be less costly than the fly-over. The fly-over ramps would require the relocation of the Stanly Lane/SR 12/121 intersection to the west; whereas the diamond interchange design would allow the intersection to remain in its current location. Other advantages of the diamond concept are that it favors the SR 29 through movements and may be less visually intrusive (Ponte, 1997).

A preliminary concept for the diamond interchange concept was presented to Caltrans staff in August, 1997. Caltrans staff indicated that they would be willing to perform a “Courtesy Review” of the concept to determine if it would satisfy Caltrans requirements. A review was conducted during May 1998. Caltrans, in a letter to Korve Engineering dated May 20, 1998, stated that the interim and long-term concepts developed by Korve Engineering were acceptable. Figure IV.C-9 shows the existing, proposed Stage 1 and full diamond interchange concepts.

Because the time frame for the construction of the ultimate mitigation plan for the State Route 121/29 interchange is beyond the cumulative target year assessed in this project, no confirmed long term project can be identified. However, this EIR is required under CEQA to disclose potential impacts and address potential



**S** Traffic Signal

**(F)** Free Flow - No Signal Control

Source: Korve Engineering, 1998.

# STANLY RANCH

SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT

Figure IV.C-9  
12/29/121 Interchange

mitigation measures which would reduce project impacts to less than significant levels.

The eventual solution to the projected problem, including funding of the eventual project, will require cooperation among a number of parties in the time period 10 to 20 years after this project requires a solution. All of the parties, including governmental and private parties, can expect to participate in some manner in arriving at an equitable solution.

d. Less-Than-Significant Impacts. The following less-than-significant impacts would occur from implementation of the *Draft SRSP*:

***Impact TRANS-A: The project is expected to produce a small demand for transit services of various types. (LTS)***

The precise demand for transit services has not been forecast, but has been determined by the authors of the EIR to be relatively small. The demand may include the needs of some employees to access the site by means other than private automobile. There may also be a small demand for visitors to access the site using transit. The project applicant has proposed to provide a shuttle transit service, a transportation center, and an employee transportation coordinator to assist in meeting this demand. If the proposed Transportation Demand Management (TDM) program is implemented and includes programs for employee shuttles as described by the applicant in early 1998, a significant part of the demand for transit services would be satisfied. Thus, any remaining transit impacts would be less-than-significant. It is noted that proposed TDM measures are useful mitigation measures for air quality impacts, as further discussed in Section IV.M of this EIR.

Condition of Approval TRANS-A: Prior to its adoption, the *Draft SRSP* TDM program shall be revised to be more specific regarding employee transit shuttles and implementation. Within one year of employee housing and resort construction, the shuttle shall be operational with annual monitoring by the resort operator and monitoring reports to the Public Works Director. (LTS)

***Impact TRANS-B: The project is expected to generate demand for pedestrian and bicycle facilities. (LTS)***

The nature of a resort is such that a certain amount of walking is to be anticipated in conjunction with resort activities. In addition, the presence of a



public Bay Trail and River Trail within the site means that bicycle and pedestrian activities generated outside of the project would need to be accommodated.

Regarding internal pedestrian use, the vehicular circulation plan of the *Draft SRSP* indicates that sidewalks would be constructed on one side of each of the streets in the residential community. These sidewalks should adequately meet the demand for any internal pedestrian activity in the neighborhoods, and no significant impacts are anticipated. Within the resort area, there are no pedestrian paths or sidewalks; within the main guest cottage area, pedestrian activity would be shared with golf carts and maintenance vehicles on ten-foot-wide streets with four foot shoulders. The expected low levels of vehicular traffic should not pose any significant safety concerns for pedestrians, provided that building setbacks and landscaping are designed to provide safe sight-distance for vehicle operators viewing potential pedestrians within the area. The resort homes would be located along a 26-foot wide street with parking limited to designated bays. As in the main guest cottage area, low levels of vehicular traffic should not pose hazards for pedestrian use of the street.

The vehicular circulation plan of the *Draft SRSP* also provides for internal and through pedestrian and bicycle travel on the Bay Trail alignment, which is to be located along Stanly Lane and Old Suscol Road. This trail would be eight to ten feet wide with two foot shoulders on each side, which is consistent with minimum Caltrans and CMA bicycle path standards. The *Draft SRSP* also calls for the Bay Trail to connect to the City of Napa's Golden Gate Drive bicycle route on the north via a newly signalized intersection, and to Cuttings Wharf Road, a designated Bay Trail route on the west. There is a long term potential for public bicycle trails on Stanly Ranch to connect to CMA-planned bicycle lane links on the SR 29 Southern Crossing bridge. Currently, Stanly Lane is public throughout its length; in the future, public bicycle paths would be provided alongside Stanly Lane although most of Stanly Lane itself would be private. No significant adverse bicycle or pedestrian impacts would be expected as a result of this project. However, it is noted that since Stanly Lane is to become a private road, the *Draft SRSP* should assure that a direct bicycle connection could continue to be made to and through Stanly Ranch.

Condition of Approval TRANS-B: The *Draft SRSP* shall assure that a direct bicycle connection between a planned future southern crossing bicycle path through Stanly Ranch is retained by providing an easement area or areas for a direct bicycle path connection near the southern crossing. (LTS)

Proposed public trails are also evaluated in Section IV.A (Land Use), Section IV.E (Hydrology), Section IV.F (Biological Resources), and Section IV.J (Public Services) and in Appendix D.

**Impact TRANS-C: The project is expected to increase demand for parking. (LTS)**

Even more so than traffic standards, parking standards are subject to local policy and regulation. Cities throughout the State have set their own standards for parking (generally expressed as a requirement based on square footage for most nonresidential uses or bedrooms for residential uses), and there is considerable variation in those standards. Because much of Stanly Ranch would be developed as a private facility, evaluation of the parking supply/demand issue is presented separately below in terms of both public and private areas. Within the private area, the major concern is one of safety. In the event of an emergency, it is important to provide sufficient parking so that emergency vehicles would not be impeded by vehicles parked in unauthorized locations. Beyond this emergency access concern and the need to satisfy the City of Napa zoning code, the degree to which parking is satisfied within the private portion of the development is largely an internal issue for the operators of the resort area.

The portion of the project site that would border a public road (Panhandle area) is the very northern portion of the project, comprising the wine center and the winery. In this area, the City has an interest in assuring that sufficient parking is provided to avoid overflow parking from occurring on Stanly Lane.

The project description summary in Table III-1 of Chapter III of the EIR documents the parking supply proposed for the project. Table IV.C-13 summarizes these estimates.

Homes in the residential neighborhoods would be required to meet city parking standards for residential units. The employee apartments would also meet city parking standards for apartments. Further, the residential street standards proposed for the development include a curb-to-curb cross-section of 32 feet. This width is adequate to accommodate parking on one side of the street and still retain sufficient room for emergency vehicle passage. Guest parking at a ratio of one space per four units would be provided again as required by code. Thus, no significant impacts should occur with respect to parking in the residential neighborhoods.

**Table IV.C-13**  
**PROPOSED PARKING SUPPLY**

Subarea	Parking Spaces	Notes
Resort Area	385	For all uses in Resort Area
Residential Neighborhoods	On-site pkg + 235	Includes on-site parking for for-sale units plus 135 guest spaces in designated areas; 100 on-site spaces for up to 54 employee apartments
Winery/Wine Center	260	160 for Wine Center; 100 for Winery
Employee Parking Lot	200	
Environmental Interpretive Center	20	20 for Center and public access.
<b>Total</b>	<b>1,100</b>	

Source: EDAW, 1997.

While there are no zoning standards for comparison for the resort complex including the main lodge, golf clubhouse, guest cottages, spa and tennis courts, a general review of the parking to be provided in this resort area suggests that sufficient parking would be provided for each of the functions listed. The project applicant notes that many of the activities would be shared, and that parking would not be needed separately for each activity. The parking rates used for each function appear to be reasonable and would not in any event create any interference with public streets or emergency vehicle access. To be conservative for the resort units, which are located along the perimeter of the resort, additional parking based on residential standards is proposed to be provided to these units. The parking evaluation assumes, per the project description provided by the project applicant, that there will not be golf tournaments.

The commercial wine center would provide parking meeting city commercial center standards. The City has no specific standard for wineries, thus surveys of four area wineries were conducted during a sunny Sunday in February and factored up by 2.0 to account for peak period demand (Korve, 1998). In addition, Napa County methodology was used as an alternative way of estimating parking demand. In both cases, the parking demand was well below the 100 spaces proposed to be provided. The winery and wine center parking lots are proposed to be linked, which would provide additional flexibility for parking use.



Parking for employees would be provided at an employee/public access parking lot at the end of Stanly Lane. (On-site transit would shuttle employees to work.) The applicant has proposed 200 employee parking spaces plus 20 spaces set aside for public access to the trails and interpretive center. The project is estimated to have up to 500 employees, with up to 300 employees on-site during a peak shift, based on experience at other Carefree Resorts. At least 54 employees will live on-site which should reduce peak parking demand by at least 35 spaces. The applicant also proposes to reduce employee parking demand by up to 25 percent through such measures as off-site transit shuttles and carpooling. This would reduce employee parking demand to 213 spaces, requiring a 233-space parking lot, rather than the 220-space lot proposed. There is adequate upland area adjacent to the parking lot to easily accommodate at least 280 parking spaces with landscape buffers, should additional spaces be needed in the future.

Condition of Approval TRANS-C: The employee/public access parking lot shall provide a minimum 233 parking spaces, of which 20 shall be reserved and marked for public use, and shall reserve an adjacent upland area next to the highway (approximately 0.4 acres) for potential parking lot expansion. The resort operator shall monitor parking lot use for five years following resort completion and provide annual reports to the Public Works Department. If parking demand exceeds expectations, the applicant shall construct additional parking. (LTS)

e. Significant Impacts. The following impacts have been determined to be significant or potentially significant and to require mitigation measures: exiting from the site during an emergency; Cumulative-Plus-Project impacts on the nearby SR 12/121/29 intersection; and Existing-Plus-Project impacts at Stanly Lane and SR 12/121; the northbound SR 29 ramps at Imola; and Cuttings Wharf Road at SR 12/121.

**Impact TRANS-1: The Draft SRSP makes adequate physical provision for emergency vehicle access. However, the routes for evacuation in an emergency may not be clear to visitors. (S)**

The proposed project has two off-site access points for emergency vehicles and for access or egress in the event of an emergency:

- *The primary access via Stanly Lane.*
- *A secondary access point from Cuttings Wharf Road.* The project plan includes a ten-foot wide EVA with seven-foot stabilized shoulders on each side (totaling 24 feet) from an internal roadway for the westernmost Neighborhood 5 to Cuttings Wharf. This exit would not be open to

public access except in cases where the emergency entrance or exit were needed.

The proposed access points have been reviewed in a meeting with the City's police and fire departments and have been found to be acceptable with one exception. The connection to the Cuttings Wharf exit is circuitous and would not be readily apparent to project visitors. For that reason, the project applicant has indicated verbally that the project would create an emergency evacuation plan for the area. If such a plan, including training and periodic review by project staff, were implemented, it would reduce potential impacts to less-than-significant levels.

Mitigation Measure TRANS-1: An emergency evacuation plan shall be developed for the site, including the identification of emergency evacuation routes and the training of staff in traffic control as well as traffic control activities such as directing visitors during emergencies. The evacuation plan shall also include an annual review with the appropriate City departments regarding field procedures. The initial and subsequent annual emergency plans shall be reviewed and approved by the City prior to approval of any building occupancy. (LTS)

**Impact TRANS-2: The project would add traffic to critical intersections in the vicinity of the site. For the Existing and Cumulative scenarios during the weekday PM and weekend peak hours, the intersection of SR 12/121 and Stanly Lane would not satisfy the LOS standards of the City or CMA. (S)**

Without mitigation, this intersection would operate at LOS F during the weekday PM and weekend peak hours. The project includes the construction of a traffic signal at this location. With the signal, the intersection would operate at LOS D or better for all scenarios.

Mitigation Measure TRANS-2: The project shall construct a traffic signal at the intersection of State Route 12/121 and Stanly Lane. The signal shall be operational by occupancy of the main resort. (LTS)

**Impact TRANS-3: The project would add traffic to critical intersections in the vicinity of the site. For the Cumulative-Plus-Project scenario in the PM peak hour, the intersection of SR 12/29/121 would not satisfy the CMA's LOS standards. (S)**

Using the significance criteria, an adverse impact would occur for the PM Peak Period at the SR 12/121/29 intersection under the Cumulative-Plus-Project scenario. The analysis indicates that the project would push the intersection

from LOS E to F. Under year 2010 condition, the cumulative intersection LOS would be E. While the project traffic would result in LOS F, any improvement would benefit both existing and future traffic other than that generated by the project. The CMA has recognized the need for future improvements to this major intersection and the CMA's long-term Program includes this intersection. Also, the City's Capital Improvement Program and City Street Improvement Fees approved in 1989 (Reso. 89-362; updated 93-198) collect fees to pay for a portion of the needed improvement. The City Street Improvement Fees recognize the regional role played by these state highways, and assume that State, federal or other sources of funds must contribute to their long term improvements.

Several intersection designs have been recently proposed by the applicant to mitigate the project and other cumulative traffic within this intersection. These concepts are illustrated in Figure IV.C-9. These include:

- Option 1 – Diamond Interchange, Stage 1. The reconstruction of the existing intersection to provide a grade separated interchange that isolates the southbound through traffic from the other movements in the intersection. Under this option, the southbound 29 through traffic would be elevated over the turning traffic, while the eastbound to northbound left turn and the northbound to westbound left turn movements would be signal controls at grade under the southbound over crossing structure. Northbound through traffic would continue to be allowed at grade and would not be controlled. This improvement results in LOS D or better with project under year 2010 conditions.
- Option 2 – Full Diamond Interchange. Reconstruct the existing intersection as a standard diamond-type interchange. Under this plan, signalization would be provided to control the turn movements while both the northbound and southbound through traffic on State Route 29 would be unobstructed, elevated on over crossings over the turning movements. This improvement results in LOS D or better with project under year 2010 conditions.

It is recognized that considerable time will be needed before any new interchange is either funded or required (existing and existing plus project LOS is acceptable) at this location. Unfortunately, no plans have been approved for a preferred long range interchange plan. Further, any major modification to the intersection will require a Caltrans *Project Study Report* (PSR) and associated environmental review, and additional funding sources. From a legal standpoint, a fair share contribution is all that the City can impose on the proponent. To facilitate construction of needed improvements in a timely manner, mitigation measures require the applicant to develop the PSR. Due to the lag time between



possible commencement and completion of development at Stanly Ranch, and completion of the required circulation improvements, 2010 cumulative impacts are concluded to be *potentially* significant, although they may prove to be fully mitigated if circulation improvements are constructed by 2010.

Mitigation Measure TRANS-3: The following combination of mitigation measures shall be implemented:

- To mitigate the impacts on the State Route 12/29/121 intersection for the “Cumulative-Plus-Project” scenario, the project applicant shall pay Street Improvement Fees based on the rates in effect at the time of building permit issuance.
- To assist in developing a long-term solution for the intersection in a timely manner for this project and other future traffic, the applicant shall develop the Caltrans Project Study Report (PSR) which evaluates and develops costs for the long-term improvements noted above. The applicant may receive credit from the Street Improvement Fees for costs associated with the PSR.
- If feasible, the project may construct a portion of the long term improvement approved in the PSR report and receive Street Improvement Fee credit for costs associated with the construction. (PS)

**Impact TRANS-4: The project would add traffic to critical intersections in the vicinity of the site. For the Existing-Plus-Project scenario in the PM peak hour, the intersection of SR 29 northbound ramps at Imola Avenue would not satisfy the City’s LOS standards. (S)**

This intersection is a stop-controlled intersection. The off-ramp is stop-sign controlled at Imola Avenue. The LOS forecast indicates that the peak hour levels of service under both the existing and future condition would be LOS F. However, the change in average delay and resultant volume-to-capacity ratio exceeds the impact criteria noted above.

The City has identified the need for a signal at Imola Avenue on its capital improvement lists. This is one of the many traffic improvements planned and funded under the City’s traffic improvement fees. The applicant’s contribution to the traffic improvement fees would assist in the funding of the needed signalization. The City has requested a Caltrans signal warrant study. If signal warrants are currently met, this improvement is anticipated before project construction. Since signal timing is unknown, impacts are deemed potentially significant (PS) short-term.

Mitigation Measure TRANS-4: To mitigate the impacts at the State Route 29 northbound ramp intersection at Imola Avenue, the project shall pay standard City street improvement fees. (PS: Short Term) (LTS: Long Term)

**Impact TRANS-5: The project would add traffic to critical intersections in the vicinity of the site. For the Existing-Plus-Project scenario in the weekend peak hour, the intersection of Cuttings Wharf Road and State Route 12/121 would not satisfy the significance criteria. (S)**

Under existing weekend conditions, this intersection operates at LOS D. On weekends, once the project is added, LOS F conditions would result. Two mitigation options are available. The first requires the project to contribute to a future signal at this location. The second, recommends a physical improvement that would reduce the project impacts to less than significant levels.

Mitigation Measure TRANS-5: One of the following measures shall be implemented:

- To mitigate the impacts at the intersection of Cuttings Wharf Road and State Route 12/121, for the Existing-Plus-Project scenario, the applicant shall contribute the project's fair contribution toward the installation of a traffic signal at this location. The project contributes 9.8 percent of the traffic during the weekend peak hour. As the City does not have jurisdiction at this intersection, the project fees should be held in a City trust account for the construction of a signal at this location. Further, the installation of a traffic signal at this location would only be provided once Caltrans signal warrants are met (PS: Short Term) (LTS: Long Term), or
- To mitigate project impacts at the intersection of Cuttings Wharf Road and State Route 12/121, for the Existing-Plus-Project scenario, the project shall construct a full acceleration lane for traffic exiting Cuttings Wharf Road onto westbound SR 121/121. This mitigation would require widening SR 12/121 to the east and west of Cutting Wharf Road to maintain one travel lane in each direction. This improvement would eliminate the westbound (mainline) traffic from the LOS calculation resulting in significant improvement to the Existing-Plus-Project condition. (LTS)

**Impact TRANS-6: The project has the potential to create short-term impacts during construction of on-site facilities as well as proposed improvements to the intersection of Stanly Lane and SR 12/121 and SR 12/29/121 intersection. (S)**

On-site construction would involve levels of truck and other construction traffic in excess of what is currently experienced in the area. Depending on when actual construction takes place, some adverse impacts could occur on the State Highways (SR 12/121 and 29/12) that border the project site. In addition, the project proposes the signalization of the intersection of Stanly Lane and SR 12/121 with related highway widening in the vicinity of the intersection. These activities have the potential to disrupt traffic during the construction period.

Mitigation Measure TRANS-6: The following combination of mitigation measures shall be implemented:

- A detailed traffic control plan shall be prepared for construction of any improvements to SR 12/121 and the public portion of Stanly Lane (up to 500 feet south of the SR 12/121 intersection). The plan must satisfy City, County and Caltrans requirements for traffic flow in their various jurisdictions. In addition, a plan shall be developed to assure that any construction traffic attributable to on-site development does not contribute to significant impacts on the public roadway system. The plan shall be approved by the City and Caltrans as appropriate prior to the issuance of any building permits for either on-site or off-site roadway construction.
- All required public frontage and street improvements shall be designed and built in accordance with Caltrans and/or City of Napa ordinances and the *Public Works Department (PWD) Standard Specifications*, unless otherwise approved by the Public Works Director.
- During non-working hours, open trenches shall be provided with appropriate signage, flashers, and barricades approved by the street superintendent to warn oncoming motorists, bicyclists and pedestrians of potential safety hazards.
- All road surfaces shall be restored to pre-project conditions after completion of any project activities. (LTS)



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## D. GEOLOGY AND SEISMICITY

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The proposed project would involve construction of buildings and other improvements in an area of variable geologic conditions. These improvements would be subject to strong seismic shaking during expected moderate to large regional earthquakes. This section of the EIR presents a description of the regional and local geologic conditions, regional seismicity and expected effects at the project site, soil conditions, and related impacts. The description of the geology at the site is based on regional geologic mapping and site-specific geotechnical evaluations performed at the project site (Joyce Associates, 1993; and Harding Lawson Associates, 1990).

Current City *General Plan* (City of Napa, 1986) policies state, in general, that new development is to be regulated to assure mitigation of safety hazards, and that geotechnical investigation is required where soil/geology conditions warrant it. *Draft General Plan* (City of Napa, 1996b) policies (pages 8-1 through 8-9) are more specific. They act to minimize risk to life and property from seismic activity, and from soil erosion and landslides. To this end, policies address the following: requiring new buildings to conform to the most recently adopted edition of the Uniform Building Code; discouraging siting of facilities necessary for emergency services, major utility lines, or high occupancy structures in areas subject to very strong groundshaking unless no alternative is available and adequate mitigation measures can be incorporated into the project; using special construction features in the design of structures where needed; constructing emergency service facilities to standards capable of withstanding a maximum credible earthquake and remaining operational. Soils policies address the following: minimizing grading in high-erosion areas; consider natural landforms in project design; use of erosion control plans for development on slopes 15 percent or greater, and application of "Hillside Development Guidelines" to hillside locations. UBC compliance would be required as a matter of course; and site development policies are further discussed in the Public Policy section (Section IV.B).

## 1. Setting

The topography and geotechnical conditions at the project site are controlled to a large extent by the geology and geomorphic processes. In northern California, active tectonics also play an important role in the shaping of the land surface. The tectonic processes present the potential for moderate to large earthquakes that could affect the project site. The geologic and geomorphic conditions at the project site also control the characteristics of surface soils.

a. Regional Geology and Geomorphology. The project site is located in the Coast Range Geomorphic Province of Northern California. This region is dominated by northwest-southeast trending ranges of low mountains and intervening valleys. The Napa Valley is an example of this regional topographic trend. The southeastward sloping valley is bounded to the east by the Howell Mountains and to the west by the Mayacamas Mountains. The predominant bedrock types within the Howell Mountains and the Mayacamas Mountains are volcanic rocks of the Pliocene Sonoma Volcanics, Late Cretaceous sedimentary rocks of the Great Valley Sequence, and minor amounts of Tertiary sedimentary rocks. The Napa Valley is filled with Quaternary alluvial and estuarine sediments.

Within the project area, the Napa River is a sinuous alluvial river that transitions in its downstream reaches to a large tidal slough. The river is maintained as a shipping channel by dredging. Construction and maintenance of the Napa River Navigation Channel was first authorized by the Rivers and Harbors Acts of 1888 and 1919. The existing channel was constructed in 1950 and was dredged in 1962-1963, 1981-1982, and 1988. The authorized channel is 100 feet wide and 15 feet deep from Mare Island Causeway to the confluence with Asylum Slough (located just east of the northeast corner of the project site) (PWA, 1997). Historic maps dating from the 1850s to present indicate that the position of the channel of the Napa River has been stable over this period.

b. Local Geology and Geomorphology. The project site is located at the western margin of the Napa Valley (Figure IV. D-1). The uplands area of the western portion of the site is characterized by low rolling hills underlain by Eocene-age Domengine Formation and older Quaternary alluvium. The highest of these hills, Home Hill, is located in the approximate center of the project site and rises to an elevation of approximately 74 feet National Geodetic Vertical Datum (NGVD). The Domengine Formation is predominantly a fine-grained marine sandstone with interbedded mudstones and siltstones. These hills and similar features on the east side of the Napa River (underlain by Sonoma Volcanics) form a constriction of the Napa Valley. The width of the valley is reduced from approximately 10,000 feet at the central portion of the City of Napa to 1,500 feet at the project site.





#### Legend

- |  |                             |   |                                |
|--|-----------------------------|---|--------------------------------|
|  | Tertiary Bedrock            |  | Bay Muds and Fill              |
|  | Older Quaternary Alluvium   |  | Topographic or Tonal Lineament |
|  | Younger Quaternary Alluvium |  | Potentially Active Landslide   |

Source: Baseline, 1997.



## STANLEY RANCH

### SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT

Figure IV.D-1  
Project Site Geology



Although the Domengine Formation is cemented and moderately strong, it does not form outcrops (exposed bedrock) at the project site. Exposure of the bedrock in trenches excavated at the project site (Joyce Associates, 1993) indicates that the bedding (layers) of the bedrock dips (slopes) northward at angles of 18 to 44 degrees. The exposed pale yellow sandstone is moderately weathered, friable to moderately strong, and closely fractured. The olive to light gray mudstone is moderately to deeply weathered, friable, and intensely fractured. Excavation of the bedrock could require heavy ripping or light blasting (Harding Lawson Associates, 1990).

Portions of the Highlands area of the site are underlain by older Quaternary alluvial sediments. These deposits consist of intermixed clays, silts, sands, and gravelly sands. The alluvial sediments overlie the Domengine bedrock. These deposits contain rock fragments derived from bedrock not located at the site sediments, indicating significant transport of these materials by the Napa River and/or smaller streams. The rock fragments of the older (stratigraphically lower) sediments are predominantly resistant Franciscan Assemblage lithologies (bedrock types) found throughout the Napa River. The youngest (stratigraphically higher) alluvial sediments contain weathered volcanic pebbles, suggesting a separate source of these sediments (possibly located to the west).

The eastern portion of the site is within the relatively flat flood plain of the Napa River. The flood plain is underlain by young sediments deposited on Lowlands along both sides of the river. These sediments are mapped as Holocene (less than 11,000 years old) bay muds, deposited in marshlands within the area of tidal influence (Fox et. al., 1973). Bay mud sediments are usually comprised of organic rich clay and silty clay with lenses of silt and sand (Helley et. al., 1979). Subsurface information is not available for the entire Lowlands area of the site and the specific characteristics (e.g., texture and consistency) and depth of these deposits are not accurately known. However, geotechnical investigation at the project site reported that the subsurface materials underlying the Lowlands consist of soft, compressible clayey silts containing peat and loose sands to depths of up to 50 feet (HLA, 1990).

The current topography at the site indicates that the North and South Lowlands of the project are separated by an area of relatively high ground surface elevation. This elevated area within the flood plain is located under the State Highway 29/12 highway bridge at the confluence of Horseshoe Bend (a former meander bend) and the main channel of the Napa River. Mapping of the area of the project site in 1858 indicates that this elevated area was emergent from the surrounding tidal marshes and served as the western terminus for a ferry operation. The ground surface of this area reaches an elevation of 7.5 feet NGVD. Comparatively, the Lowlands north of this area range in elevation from approximately 0.7 to 2.3 feet NGVD. To the south, the Lowlands elevations range from 0.3 to -1.6 feet NGVD.

A southwestward flowing channel currently provides drainage of the South Lowlands. This channel is in the approximate position of a natural secondary tidal slough shown on an 1858 map of the area of the project site. The North Lowlands are drained by the linear channel located in the approximate center of this area. Prior to development (drainage of wetlands), a westward flowing secondary tidal slough drained the southern portion of the North Lowlands; a linear series of ponds were located in the northern portion.

The current elevation of the Lowlands indicates that these surfaces have subsided since the time of their formation. The natural surface of tidal marshland typically stabilized at the approximate elevation of the mean higher high water (MHHW) level. At the project site, this level would be equivalent to approximate elevation 3.0 to 3.7 feet NGVD (PWA, 1997). Therefore, the Lowlands have subsided on the order of three to five feet. The subsidence of reclaimed tidal marshes is a common phenomenon. When the organic deposits are drained (for agricultural use, in this case), the dewatered sediments consolidate and the organic material is oxidized (consumed), resulting in settlement of the ground surface. The tidal Lowlands north and south of the project site are the Lowlands that were formed as tidal marshes, receiving sediment deposition during normal tidal cycles and occasional river flooding events.

The Lowlands of the project site are currently protected from tidal flooding by a low levee constructed along the west bank of the Napa River. The levee was apparently constructed with dredged river sediments and possibly other soil fill. No records of construction of the levee are available and, therefore, the levee can be considered a nonengineered structure. The morphologic definition of the levee varies from indistinct in the southeastern portion of the site to moderately well-defined in the northeast. The crest of the levee is relatively narrow (approximately eight to ten feet wide). The side slopes on the landward side of the levee are moderate to gentle, generally less steep than 2:1 (horizontal to vertical ratio). The river side of the levee forms the west bank of the Napa River. The slope of this side of the levee is similar to the landward side except in areas of bank steepening caused by erosion. In these areas, the bank is near vertical and scalloped, the result of small bank failures. Riprap has been placed in some areas as erosion control. On the opposite (east) side of the river, a major portion of the bank is riprapped, protecting the Napa Sanitation District (NSD) wastewater treatment facilities.

The crest of the levee has a typical elevation of five to six feet NGVD. The levee is only about two to three feet above mean higher high water (3.8 feet NGVD). At mean lower low water (-2.8), the height of the levee is approximately eight to nine feet above the river level.

c. Soils. Soil is generally defined as the unconsolidated mixture of mineral grains and organic material that mantles the land surfaces. Soils can develop on unconsolidated sediments and weathered bedrock. The characteristics of soil reflect the five major influences on their development-topography, climate, biological activity, parent (source) material, and time. The soil types (mapping units) at the project site and surrounding area have been mapped and characterized by the Soil Conservation Service (SCS) (USDA, 1978). The regional mapping by the SCS has been generally confirmed by site-specific soils mapping and testing (Nagaoka, 1984, 1997).

The topography and subsurface materials are the apparent major controls on soil development at the project site. The Highlands in the western portion of the site are predominantly covered with soils of the Haire Series. The soils have developed on older alluvium and sandstone bedrock. The predominant mapping unit is the Haire clay loam, a well-drained, deeply-developed soil. The soil profile typically includes a low permeability, clayey subsoil. The shrink-swell potential is moderate. The runoff rate and the erosion hazard are moderate. The Diablo clay is also present in the upland area on the tops of the highest hills. This soil, developed directly on Domengine Formation sandstone, is relatively thin and has a low permeability. The shrink-swell potential is moderate to high.

The North Lowlands include fine-grained soils developed on alluvial deposits along the Napa River. These soils include the Clear Lake and Diablo clays. These soils develop on flat topographic areas that are frequently flooded. The permeability of these clayey soils is slow and the shrink-well potential is moderate to high. In these areas of low topographic relief, runoff rates and erosion hazards are low. However, where exposed in the riverbank of the Napa River, this soil can be subject to significant erosion by river flows and boat wakes.

The soils of the marsh environment of the South Lowlands and southeastern portion of the North Lowlands are characterized as Reyes silty clay. The parent material can include "muck", estuarine deposits with a high organic content. The uppermost portion of the soil profile includes an organic-rich, extremely acidic silty clay. This characteristic presents a moderate to high hazard of corrosion for uncoated steel. These soils have a low dry density and low strength. The shrink-swell potential is moderate to high. Similar to the clays in the North Lowlands, the runoff rates and erosion hazards are low (except where exposed in the riverbank).

d. Slope Stability. The topography of the project site includes gentle rolling hills and flat flood plain. The sideslips of the hills are gentle (less than five percent) in most areas of the site but are locally moderately steep (ten to 15 percent) on the higher hills. The City of Napa *Draft General Plan* classifies the entire project site as an area having the least relative landslide susceptibility (City of Napa, 1996a).



Regional slope stability mapping (Nilsen et. al., 1979) generally characterizes the slopes of the upland areas of the project site as stable. Localized areas of the site, classified as unstable by this regional evaluation (northern and southwestern portions of Home Hill), were inspected during site reconnaissance and not found to exhibit characteristics of active slope failure (e.g., arcuate head scarps or irregular slope topography). The topography of the relatively steep slope at the northern side of Cistern Hill indicates that a portion of this slope is an inactive or extremely slow moving landslide (Figure IV. D-1).

As described previously, the west bank of the Napa River at the eastern margin of the site is susceptible to erosion and slope failure. Several relatively small (20- to 40-foot wide) arcuate rotational failures were observed along the bank during site reconnaissance. The failures may be caused by undermining of the bank by erosion (river flow or boat wakes). The failures may also have occurred during low tides (particularly extreme low tides) when the exposed bank height is increased and the potential for increased pore water pressures within saturated sediments is high. In addition, toppling and uprooting of trees on the levee could cause or contribute to the formation of the small bank failures. The Lowlands areas of the site are classified as unstable by regional slope stability investigations (Nilsen et. al., 1979).

e. Seismicity. The region of coastal northern California in which the project site is located is seismically active. The release of accumulated strain within the region results in rupture of the earth's crust, typically along pre-existing faults. The resulting earthquake generates seismic waves that produce ground shaking as the waves move through the earth. The "magnitude" (M) of an earthquake is a measure of the size or energy release at the source of the earthquake.

The severity of ground shaking at any particular point is referred to as "intensity" and is a subjective measure of the effects of ground shaking on people, structures, and earth materials. The intensity of shaking generally decreases (is attenuated) with distance away from the source of the earthquake. The level of intensity is commonly defined by comparison to the Modified Mercalli Intensity (MMI) Scale (Table IV.D-1) that subjectively categorizes the intensity on the basis of observed effects of seismic shaking on common objects. Quantitative measurement of the level of ground motion during earthquakes is made by strong-motion seismographs (or accelerometers) that measure the acceleration of objects at the ground surface caused by seismic shaking. These measurements are made relative to and are expressed as a fraction of the acceleration of gravity (g). A comparison of ground acceleration values to the MMI scale is presented in Table IV.D-1.

The site is within Seismic Zone 4 (the highest seismic risk zone) of the Uniform Building Code. The seismicity of the region is related to movement of the earth's crust along the lithospheric plate boundary between the Pacific (to the west) and

**Table IV.D-1**  
**MODIFIED MERCALLI SCALE<sup>a</sup>**

	Intensity	Effects	v, <sup>b</sup> cm/s	g <sup>c</sup>
M <sup>d</sup>	I.	Not felt. Marginal and long-period effects of large earthquakes.		
3	II.	Felt by persons at rest, on upper floors, or favorably placed.		
	III.	Felt indoors. Hanging objects swing. Vibration like passing of light trucks. Duration estimated. May not be recognized as an earthquake.		0.0035-0.007
4	IV.	Hanging objects swing. Vibration like passing of heavy trucks; or sensation of a jolt like a heavy ball striking the walls. Standing motor cars rock. Windows, dishes, doors rattle. Glasses clink. Crockery clashes. In the upper range of IV wooden walls and frame creak.		0.007-0.015
	V.	Felt outdoors; direction estimated. Sleepers awakened. Liquids disturbed, some spilled. Small unstable objects displaced or upset. Doors swing, close, open. Shutters, pictures move. Pendulum clocks stop, start, change rate.	1-3	0.015-0.035
5	VI.	Felt by all. Many frightened and run outdoors. Persons walk unsteadily. Windows, dishes, glassware broken. Knickknacks, books, etc., off shelves. Pictures off walls. Furniture moved or overturned. Weak plaster and masonry D cracked. Small bells ring (church, school). Trees, bushes shaken (visibly, or heard to rustle - CFR).	3-7	0.035-0.07
6	VII.	Difficult to stand. Noticed by drivers of motor cars. Hanging objects quiver. Furniture broken. Damage to masonry D, including cracks. Weak chimneys broken at roof line. Fall of plaster, loose bricks, stones, tiles, cornices (also unbraced parapets and architectural ornaments - CFR). Some cracks in masonry C. Waves on ponds; water turbid with mud. Small slides and caving in along sand or gravel banks. Large bells ring. Concrete irrigation ditches damaged.	7-20	0.07-0.15
	VIII.	Steering of motor cars affected. Damage to masonry C; partial collapse. Some damage to masonry B; none to masonry A. Fall of stucco and some masonry walls. Twisting, fall of chimneys, factory stacks, monuments, towers, elevated tanks. Frame houses moved on foundations if not bolted down; loose panel walls thrown out. Decayed piling broken off. Branches broken from trees. Changes in flow or temperature of springs and wells. Cracks in wet ground and on steep slopes.	20-60	0.15-0.35
7	IX.	General panic. Masonry D destroyed; masonry C heavily damaged, sometimes with complete collapse; masonry B seriously damaged. (General damage to foundations - CFR.) Frame structures, if not bolted, shifted off foundations. Frames racked. Serious damage to reservoirs. Underground pipes broken. Conspicuous cracks in ground. In alluviated areas sand and mud ejected, earthquake foundations, sand craters.	60-200	0.35-0.7
8	X.	Most masonry and frame structures destroyed with their foundations. Some well-built wooden structures and bridges destroyed. Serious damage to dams, dikes, embankments. Large landslides. Water thrown on banks of canals, rivers, lakes, etc. Sand and mud shifted horizontally on beaches and flat land. Rails bent slightly.	200-500	0.7-1.2
	XI.	Rails bent greatly. Underground pipelines completely out of service.		>1.2
	XII.	Damage nearly total. Large rock masses displaced. Lines of sight and level distorted. Objects thrown into the air.		

<sup>a</sup> From Richter (1958).

<sup>b</sup> Average peak ground velocity, centimeters per second (cm/s).

<sup>c</sup> Average peak acceleration (away from source).

<sup>d</sup> Richter magnitude correlation.

**Note:** Masonry A, B, C, D. To avoid ambiguity of language, the quality of masonry, brick or otherwise, is specified by the following lettering (which has no connection with the conventional Class A, B, C construction).

- *Masonry A:* Good workmanship, mortar, and design, reinforced, especially laterally, and bound together by using steel, concrete, etc; designed to resist lateral forces.
- *Masonry B:* Good workmanship and mortar, reinforced, but not designed to resist lateral forces.
- *Masonry C:* Ordinary workmanship and mortar; no extreme weaknesses such as non-tied-in corners, but masonry is neither reinforced nor designed against horizontal forces.
- *Masonry D:* Weak materials, such as adobe; poor mortar; low standards of workmanship; weak horizontally.

North America lithospheric plates. Within this area, the plate boundary is generally defined by a set of northwest-southeast trending right-lateral, strike-slip faults of the San Andreas Fault System (Figure IV.D-2). The major regional faults include the San Andreas, Hayward, Calaveras, Greenville, and Rodgers Creek Faults. Each of these faults is considered active<sup>1</sup> and capable of generating moderate to large earthquakes. In addition to these major faults, numerous other active and potentially active faults have been identified in the San Francisco Bay region. Active faults within 25 miles of the project site include the West Napa, Green Valley, Cordelia, and Concord Faults. The Coast Range-Sierran Block Boundary Zone, located along the western margin of the Central Valley, is also considered capable of generating moderate to large earthquakes. At least six historic earthquakes have produced significant (MMI VI or greater) ground shaking in the area surrounding the project site. The characteristics of the active faults that could affect the project site are summarized in Table IV.D-2.

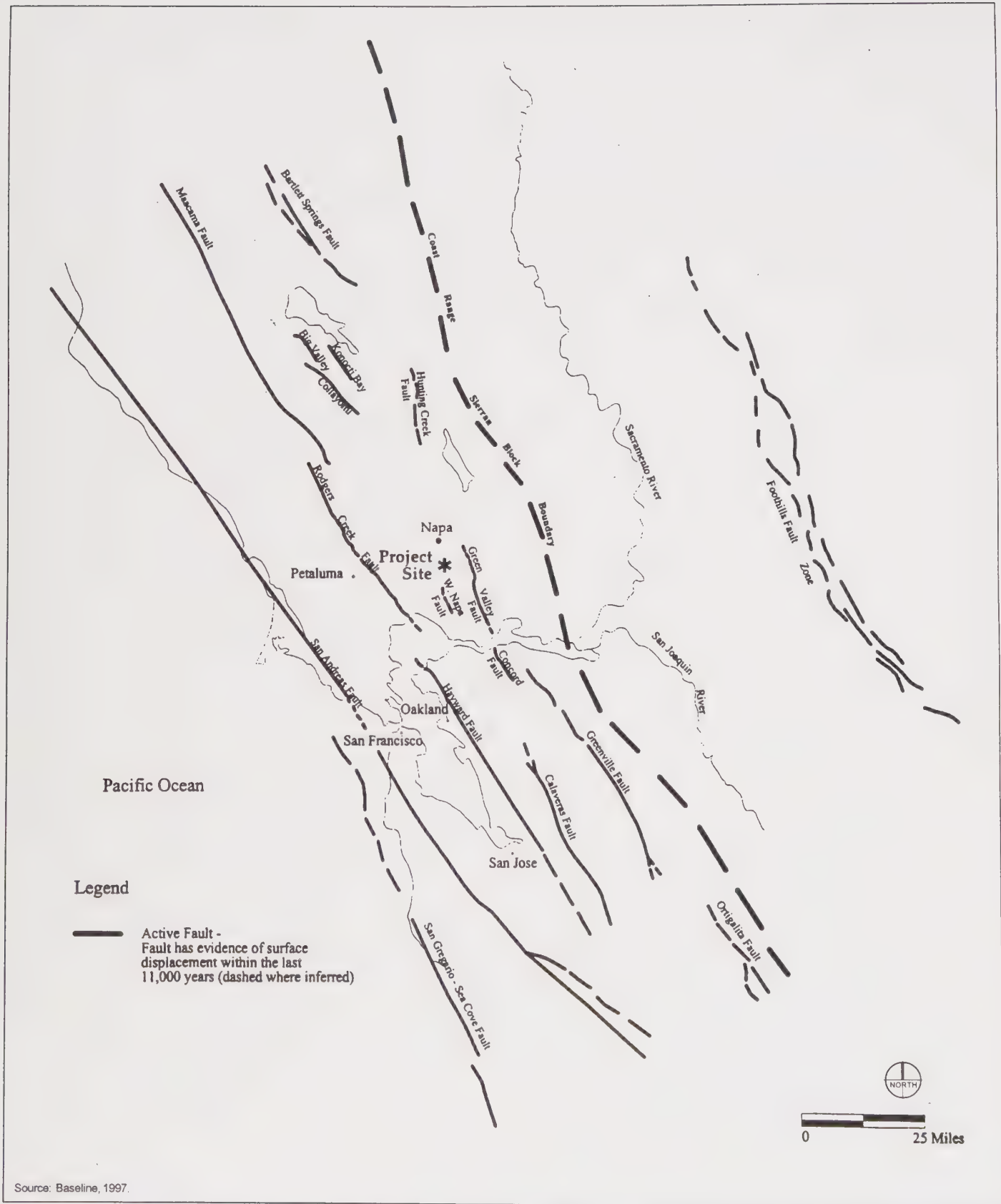
The Working Group on California Earthquake Probabilities has estimated that there is a 67 percent probability that one or more large earthquakes (M7 or greater) will occur along one of the major fault zones (San Andreas, Hayward, or Rodgers Creek) in the San Francisco Bay Area during the 30-year period 1990 to 2020 (USGS, 1990). However, this probability should be regarded as minimum, as large earthquakes are also possible on fault zones (e.g., Calaveras, San Gregorio, and Greenville) not included in this regional investigation. The probability of the expected maximum earthquake (M7) on the Rodgers Creek fault (located approximately 13 miles west of the project site) is 22 percent. This earthquake would be expected to cause MMI VIII seismic shaking at the site.

Although the probability of expected earthquakes has not been calculated for other faults in the region, probabilistic seismic hazard analyses have been prepared for the entire state of California. These analyses were performed on the basis of more general estimated information on seismic sources and general geological mapping information. The expected peak horizontal acceleration (with a 10 percent chance of being exceeded in the next 50 years) generated by any of the seismic sources potentially affecting the area, including the project site, is estimated by the Federal Emergency Management Agency (FEMA) to be approximately 0.4g (FEMA, 1992). The California Division of Mines and Geology (CDMG) estimates this peak acceleration to be 0.5 to 0.6g (CDMG, 1996). This range of acceleration would be equivalent to MMI IX shaking.

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<sup>1</sup> An active fault is defined by the California State Mining and Geology Board as a fault that has had surface displacement with Holocene time about the last 11,000 years.





# **STANLY RANCH** SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT

Figure IV.D-2  
 Regional Faults

**Table IV.D-2  
ACTIVE FAULTS POTENTIALLY  
AFFECTING THE PROJECT SITE**

<b>Fault Name</b>	<b>Maximum Magnitude<sup>a</sup></b>	<b>Distance from Site (km)</b>	<b>Distance<sup>b</sup> from Site (miles)</b>	<b>Historic Earthquakes</b>	<b>Recurrence Interval<sup>c</sup> (years)</b>	<b>Expected MMI<sup>d</sup> at Project Site</b>
Calaveras (north)	6.8	76	47.1	1861	146	VI
Cordelia <sup>e</sup>	6.7	20.6	12.8	none	?	VIII
Concord-Green Valley	6.9	15.4	9.5	none	176	VIII
CRSBBZ <sup>f</sup>	7	38.6	23.9	1892	?	VII
Greenville	6.9	56.7	35.2	1980	521	VI
Hayward (total)	7.1	38.6	23.9	1836?, 1868	167	VII
Maacama (south)	7	72	44.6	none	220	VI
Rodgers Creek	7	20.6	12.8	1889	222	VIII
San Andreas (1906)	7.9	64.4	39.9	1906	210	VII
West Napa	6.5	0.1	0.1	none	701	IX

<sup>a</sup> Expected maximum Magnitude(1) from the California Division of Mines and Geology California Fault Parameters (<http://www.consrev.ca.gov/dmg/shezp/ftindex.html>), except where noted.

<sup>b</sup> Distance to site measured on Jennings, C.W., 1994, California Divisions of Mines and Geology Geologic Data Map No. 6.

<sup>c</sup> Recurrence interval (the estimated time between earthquakes) from California Division of Mines and Geology California Fault Parameters.

<sup>d</sup> Expected Modified Mercalli Intensity (see Table IV.D-1) estimated on the basis of peak ground acceleration derived from magnitude-distance-attenuation relationship developed by Joyner and Boore (1981).

<sup>e</sup> Data from Wesnousky, S.G., 1986, Journal of Geophysical Research, 91(B12), pp. 12,587 -12,631.

<sup>f</sup> Coast Range-Seirran Block Boundary Zone data from Wakabayashi, J. and Smith, D.L., 1994, Bulletin of the Seismological Society of America, 84(6), pp.1960-1970.

The West Napa Fault is mapped within the project site. Published geologic maps differ in their interpretation of the location and extent of the West Napa Fault. In general, the northwest-southeast trending fault is mapped as a series of discontinuous fault segments extending approximately 22 miles from Yountville to Napa Junction (Bryant, 1982). The fault is considered capable of generating a M 6.5 maximum expected earthquake. Of the seismic sources that could significantly affect the project site, the maximum expected earthquake on the West Napa Fault would generate the most severe shaking at the project site. An earthquake of this magnitude on the fault would be expected to generate MMI IX ground shaking at the project site.

(1) **Fault Rupture.** Evaluation of active and potentially active faults within California was mandated by the Alquist-Priolo Earthquake Fault Zoning Act. The Act established restrictions on the issuance of building permits for construction of structures for human habitation within the established zones to reduce the potential for damage related to fault rupture. Under the provisions of the Act, the CDMG has implemented a program to evaluate the recency of displacement (movement) for faults and establish Earthquake Fault Zones (EFZ) for those faults that have evidence of fault rupture within the last 11,000 years (Holocene).

Recent faulting that results in ground surface rupture (generally only in earthquakes greater than M5) creates enduring evidence within a landscape. Along strike-slip faults, such evidence includes offset of drainage channels across the fault, closed surface depressions ("sag ponds") along the fault, low linear fault scarps, or linear valleys. Many of the linear features, particularly where indistinct, are referred to as "lineaments." These types of geomorphic features provide evidence of the location of the fault trace, or intersection of the fault with the earth's surface. A fault trace can be a single, well-defined feature or a complex of discontinuous segments or splays of the fault. A fault is zoned under the Act if, following completion of a fault evaluation report, the fault trace is found to be "sufficiently active" and "well-defined." A fault is considered sufficiently active if evidence of Holocene displacement along the fault trace is demonstrated. Generally, this determination is made on the basis of identification of fault-related geomorphic features developed in Holocene-age sediments or soil. A fault is well-defined if its trace is clearly detectable by a trained geologist. The fault evaluation reports are prepared for CDMG by geologists who specialize in interpretation of fault features.

The project site is not located within an Alquist-Priolo Earthquake Fault Zone. However, the project site is located along a portion of the mapped trace of the West Napa Fault that is identified as a structure that has experienced Late Quaternary (past 700,000 years) fault displacement (Jennings, 1994). The potential for fault rupture in the area of the project site has been evaluated by the CDMG in an evaluation of the recency of activity on the West Napa Fault under the Fault Evaluation and Zoning Program developed for implementation of the Act (Bryant, 1982). The evaluation described and reviewed previously completed geologic mapping of the West Napa Fault (Fox et. al., 1973; Helley et. al., 1977). The West Napa Fault evaluation specifically investigated potential geomorphic evidence of faulting, including lineaments at the project site.

The fault evaluation concluded that the West Napa Fault is sufficiently active and well-defined to require applying an Alquist-Priolo Earthquake Fault Zone (EFZ) for that portion of the fault south of the Napa River. The northern end of the EFZ is located approximately 2,000 feet south of the southern boundary of the project site (Figure IV.D-1). Evidence of recent fault rupture along this portion of the fault



included sharp tonal lineaments, deflected drainage channels, and scarps in Holocene alluvium. Subsequent to completion of the fault evaluation report, site-specific investigations within the West Napa Fault EFZ have been performed. Evidence for active faulting has been identified in some, but not all, of these investigations (Joyce Associates, 1993). Conclusive evidence of active faulting has not been consistently demonstrated by these investigations and CDMG is not currently considering re-evaluation of the West Napa Fault EFZ (Bryant, 1993).

Although possible fault-related features were mapped north of the Napa River, these features were not found to be well-defined. Within the project site, five lineaments (Figure IV.D-1) have been identified. Evidence of active faulting along these lineaments was not observed in regional fault mapping investigations (Bryant, 1982; Helley and Herd, 1977). However, it is possible that the fault is active but has a very slow slip rate (rate of displacement) (Bryant, 1982). Geomorphic evidence of faults with low slip rates or long recurrence intervals (i.e., time between earthquakes) can be obscured by erosion or other geomorphic processes. Faults of this nature may not meet the requirements for zoning and building restrictions under the Act.

The potential for fault rupture along the lineaments was also evaluated by a geologic investigation performed at the site (Joyce, 1990). This investigation included excavation of trenches across three of the lineaments (L-1, L-2, and L-3) within the Highlands area of the site that is within the area of proposed improvements. The trenches exposed soil units, alluvium, colluvium, and underlying bedrock. Detailed trench logs were prepared, describing characteristics of the subsurface materials. The trench logs identified shearing in the bedrock across which some displacement of bedding was observed, and can be interpreted as faults. These features did not extend upward into the overlying (younger) sediments and soil. On this basis (i.e., the faults did not offset young deposits), the report for the investigation concluded that the shears did not represent active faults and that the potential for future fault rupture was low.

Two lineaments at the project site were not trenched because their mapped locations were not within areas of proposed improvements. Lineament L-4 is located at the southwestern margin of the site in an area proposed for roadway access. Lineament L-5 extends northwestward from the base of the eastern slope of Cistern Hill across the North Lowlands. The report on the investigation recommended a setback area along this lineament within which structures for human occupancy should not be constructed without further fault hazard investigation. The recommended setback is 100 feet wide where the lineament is relatively well-defined, and 200 feet wide where the lineament is less distinct. No structures are proposed by the project within the recommended setback along this lineament.

(2) Seismic Response. The intensity of ground shaking during an earthquake is affected significantly by the type of earth materials that underlie a particular location. Although intensity generally decreases with distance from the source of an earthquake, some geologic materials have the tendency to amplify or accentuate the level of ground shaking. In general, peak ground accelerations are relatively lower for sites underlain by bedrock relative to those underlain by unconsolidated deposits (e.g., alluvium). Deep, loose, or soft materials have been observed to significantly amplify ground motion. The Highlands and Lowlands of the project site would be expected to have different responses to seismic shaking. Regional characterization of the susceptibility of geologic materials to seismic shaking (Perkins and Boatwright, 1995) indicates that the bay mud deposits within the Lowlands would have an "extremely high" shaking amplification. The older alluvium would have "moderate" amplification and bedrock areas have a "moderately low" amplification (Figure IV.D-1).

(3) Liquefaction. During moderate to strong seismic shaking, loose saturated granular sediments (sands, silty sands, and noncohesive silts) can undergo a type of ground failure referred to as liquefaction. Propagation of seismic waves can cause increases in pore water pressure within sediments. Under this condition, the sediments can suddenly lose all shear strength and change from a solid to fluid state. The liquefied sediments can flow, possibly resulting in horizontal or vertical displacement of the ground surface. Such displacements can result in significant damage to buildings or other improvements constructed on liquefiable sediments.

An evaluation and mapping of liquefaction susceptibility in the region of the project site was completed in 1994 (Sowers et. al., 1994). In general, the areas of the site underlain by bedrock and older alluvium have a very low susceptibility to liquefaction. Holocene (younger) alluvial deposits within the valleys at the site have a moderate to high liquefaction susceptibility where groundwater levels are within 10 feet of the ground surface and the potential for shallow, saturated, loose sediments is relatively high. The bay mud (estuarine deposits) in the lowlands have a very high susceptibility to liquefaction. These sediments would be expected to contain significant layers of loose, saturated sands and silty sand at shallow depths.

## **2. Impacts and Mitigation Measures**

a. Criteria of Significance. Soil properties and proximity to active earthquake fault zones are the geotechnical factors of principal concern. The following geotechnical and seismic conditions would constitute significant impacts:

- Alteration of land forms that substantially change the topography or ground surface relief features;

- Pursuant to the CEQA Guidelines, Appendix G (r), exposure of people or structures to major geologic hazards, including earthquakes, landslides, mudslides, ground failure, or similar hazards such as settlement and ground shaking; and
- Decrease availability of valuable mineral resources.

b. Less-Than-Significant Geologic and Seismic Impacts. The following impacts have been determined to be less than significant.

***Impact GEO-A: The proposed project would include construction of numerous improvements throughout the Highlands areas of the western portion of the project site. Construction of these improvements would require large-scale grading and modification of the existing topography which can result in significant erosion and the potential for slope destabilization. (LTS)***

The potential impacts of erosion on the quality of water resources are discussed in the Hydrology and Water Quality section of this EIR. The slopes within areas of the project site where development is proposed are generally stable and have slope steepness less than 15 percent. Grading of the slopes in compliance with the requirements of the Uniform Building Code and local grading ordinances would generally mitigate potential impacts related to slope stability. The City of Napa requires that grading plans be submitted for approval by the Department of Public Works as part of the development review process.

Provisions of the UBC require that the grading plan for the proposed project be accompanied by a soils engineering report (prepared by a licensed engineer) and an engineering geology report (prepared by a certified engineering geologist). These reports are also required by City of Napa (Napa Municipal Code Section 16.36.200) for all subdivisions or parcel maps. These reports will include conclusions regarding the geologic and geotechnical conditions at the site and recommendations for appropriate grading procedures and design criteria for any necessary corrective measures (e.g., buttress fills, retaining structures, surface and subsurface drainage). The UBC also sets minimum standards for cut and fill slope designs that can only be modified upon recommendations by a qualified professional and approval by the building official. UBC and the Napa Municipal Code also include provisions for inspection of the grading operations by a licensed engineer and certified engineering geologist to ensure that if conditions exposed during grading warrant, revision of the grading plan can be made and implemented. In addition, all project-related grading trenching, backfilling, and compaction operations would be required to be conducted in accordance with the City of Napa Public Works Department Standard Specifications.



Conditions of Approval GEO-A: The following standard City Conditions of Approval would apply:

- All project-related grading, trenching, backfilling and compaction operations shall be conducted in accordance with the City of Napa Public Works Department Standard Specifications.
- For all subdivisions and parcel maps, the applicant shall prepare a Soils Investigation/Geotechnical Report in accordance with Section 16.36.200 of the Napa Municipal Code. It shall be submitted to the Public Works Director for review and determination of adequacy before approval of the parcel or final map. The improvement plans shall incorporate all design and construction criteria specified in the report. The geotechnical engineer shall sign the improvement plans and approve them as conforming to their recommendations prior to final map approval. The geotechnical engineer shall also assume responsibility for inspection of the work and shall certify to the City, prior to acceptance of the work, that the work performed is adequate and complies with their recommendations. Additional soils information may be required by the Chief Building Inspector during the plan check of individual house plans in accordance with Title 15 of the Napa Municipal Code.

***Impact GEO-B: Implementation of the proposed project would result in construction of buildings near the mapped trace of the West Napa Fault. (LTS)***

At the project site, the fault is not zoned as active under the Alquist-Priolo Earthquake Fault Zoning Act. As described in the Setting section, potential evidence of faulting at the site has been investigated under a fault evaluation program conducted by CDMG and conclusive evidence of recent fault rupture was not found. In addition, site-specific investigation of lineaments at the project site did not identify evidence of recent fault rupture. Although the investigation did not investigate two lineaments (L-4 and L-5) at the project site, structures for human habitation are not proposed in locations that would be transected by the mapped lineaments. In addition, the investigation recommended a 100- to 200-foot setback zone along the lineaments within which structures for human habitation would not be permitted unless further fault hazard evaluation is performed. This restriction would be appropriate and should be included as a condition of approval to assure that geologic and seismic impacts are addressed in the final design.

The proposed alternative for the on-site fire station at the southeast corner of the intersection of Stanly Lane and State Highway 12/121 would be outside the proposed setback zone. The potential for primary fault rupture at the project site is

characterized as low and the potential impacts related to fault rupture would be less-than-significant.

The City's *Draft General Plan* includes Policy HS 1.5 which states that facilities necessary for emergency services shall be capable of withstanding a maximum credible earthquake from any of the seven active faults in the region and remain operational to provide emergency response. The proposed new fire station could be subject to strong to severe seismic shaking during expected earthquakes on regional active faults. Structural damage to the station would not be expected as the building would be constructed in compliance with the seismic provisions of the most recently adopted UBC. However, strong seismic shaking could result in damage to critical non-structural components of the station, such as electrical or communications systems. Failure of these systems could cause interruption of operation of the station. This possibility is addressed by fire station design requirements and emergency procedures implemented by the City Fire Department. Each station is required to have a generator for emergency electrical power supply. Doors for the stations have manual overrides to permit opening and closing in the event of a power failure. The stations and each emergency vehicle are linked to the central dispatching facility and each other through radio communication. Therefore, in the event of disruption of non-structural components of the station during an earthquake, communication would be maintained and the station could remain operational for emergency services.

Condition of Approval GEO-B: A 200-foot setback shall be observed for all structures designed for human habitation from lineaments L-4 and L-5 identified in Figure IV.D-1 unless further fault hazard evaluation is performed which concludes such setback is unnecessary. (LTS)

In general, the geologic materials and soils within the areas of proposed development of improvements have engineering properties that are suitable for construction of foundations, roadways, and pavements. Similar geologic and soils conditions are encountered in many areas of development within Napa County. The potential effects of the moderate to high shrink-swell potential of the project site soils could be mitigated by standard engineering practices (including soil replacement or treatment).

Significant mineral resources have not been identified at the site and, therefore, the project would not affect the availability of such resources. The project site does not include any unique geological or physical features that could be modified or destroyed by implementation of the project.

c. Significant Impacts. The following discussion addresses the remaining potential significant impacts related to the proposed project:

**Impact GEO-1: Expected seismic shaking at the project site could result in damage to structures, nonstructural damage, and possible injury to site occupants. (S)**

The project site would experience moderate to strong ground shaking during expected earthquakes on several regional faults. Expected levels of ground shaking could cause structural and nonstructural damage at the proposed project site. Such damage could result in injuries to the occupants of the project site. Although the damage by seismic shaking to structures built in compliance with the California Building Code requirements for seismic design would not likely cause collapse of the structures, the damage could require significant repairs. In addition to potential structural damage, nonstructural damage should be expected. Nonstructural damage could include the following: breakage of windows, doors, piping, ducts, and light fixtures; collapse of walls, partitions, ceilings, and stairways; or damage to contents (appliances, computer equipment, and furnishings). Damage to nonstructural elements can account for the majority of a building's replacement cost following a major earthquake. In addition, the strong ground shaking could result in damage to water and wastewater pipelines.

Mitigation Measure GEO-1: Although the potential for strong seismic shaking cannot be eliminated at the project site and surrounding area, all of the following mitigation measures shall be implemented to reduce the impacts related to expected strong ground shaking to less-than-significant levels:

- All structures proposed for the project shall be designed and constructed in accordance with the provisions of the most recently adopted California Building Code. Issuance of building permits shall not be approved until after review and approval of building design to ensure compliance with the provisions of the Code by the City Public Works Department.
- The master developer shall prepare an earthquake preparedness and emergency response plan for all public use facilities, including the golf clubhouse, the wine center, and resort lodge. The plan shall be submitted for review and approval by the City Department of Public Works prior to occupancy of the structures.
- Prior to occupation of residential units at the project site, an earthquake hazards information document shall be prepared by the applicant and made available to any potential occupants. The document shall describe the potential for strong ground shaking at the



site, potential effects of such shaking, and earthquake preparedness procedures. (LTS)

**Impact GEO-2: Potential liquefaction of alluvial sediments on the flood plain of the Napa River could result in damage to improvements constructed at the project site. (S)**

The bay mud deposits in the Lowlands portion of the project site have a very high susceptibility for liquefaction. Maximum expected earthquakes on the several regional faults (including the West Napa, Rodgers Creek, Hayward, and San Andreas Faults) could generate ground shaking at the site that could result in liquefaction of these sediments. Site-specific evaluation of the potential for liquefaction has not been performed. The proposed project generally avoids placement of improvements within the Lowlands area. However, an Environmental Interpretive Center and components of the utility systems would be located within this area. The existing 36-inch water supply pipeline crosses this area, as do the proposed raw and treated wastewater lines to and from the Napa Sanitation District wastewater treatment plant, and reclaimed water lines. If constructed in liquefiable sediments, these pipelines could be damaged during strong ground shaking. Damage could result in disruption of service and potential discharge of wastewater.

**Mitigation Measure GEO-2:** The following combination of mitigation measures shall be implemented to reduce the impacts related to liquefaction of site soils during strong ground shaking or settlement:

- Prior to construction of any structures for human habitation or other improvements within areas of the site mapped as bay mud, an evaluation of the potential for liquefaction shall be performed by a licensed Geotechnical Engineer or Certified Engineering Geologist. The evaluation shall be based on site-specific subsurface data and shall conform with the California Division of Mines and Geology "Guidelines for Evaluating Seismic Hazards in California" (CDMG, 1997). The evaluation shall also address the potential for damage to building foundations, pavements and utilities due to settlement under static (non-seismic) conditions. A report of the evaluation shall be prepared and submitted to the City Department of Public Works prior to the issuance of a building permit.
- All water supply and wastewater pipelines constructed in areas mapped as bay mud shall be designed to minimize the potential for damage in the event of strong ground shaking and potential liquefaction. The pipeline design shall be prepared by a licensed engineer with experience in design and construction in areas of high liquefaction potential. (LTS)

**Impact GEO-3: The high potential for corrosion of uncoated steel within soils could present significant maintenance problems for pipelines constructed for the project. (S)**

The soils in the Lowlands areas of the project site present a moderate to high potential for corrosion of untreated steel. Utility pipelines (including water and wastewater trunk lines) would be required to cross areas containing these soils. Corrosion of the pipelines or other buried steel structures could result in failure of the lines. Repair or replacement of the pipelines could result in interruption of service.

Mitigation Measure GEO-3: The following mitigation measure would reduce the potential for the adverse effects of soils on buried utilities:

- All buried utilities and other structures shall be designed by a qualified licensed engineer and constructed to provide corrosion protection. Corrosion protection could include cathodic protection for metallic materials, providing noncorrosive coatings for corrosive metals, use of noncorrosive materials, or placement of noncorrosive backfill around buried structures. (LTS)

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## E. HYDROLOGY, DRAINAGE, AND WATER QUALITY

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The existing City of Napa *General Plan* (City of Napa, 1986) contains several policies related to hydrology, drainage and water quality. In general, these policies state that development shall be regulated to assure mitigation of safety hazards such as flooding, and encourage protecting and improving water quality in streams and marshes. *Draft General Plan* (City of Napa, 1996b) policies are more specific. They are found in Chapter 7, under plant, wildlife and fish habitat, and water quality, and Chapter 8, under flooding and dam failure. These policies speak to reviewing projects near waterways to ensure they protect and minimize effects on riparian and aquatic habitats and support maintenance and improvement of water quality. The policies also recommend adopting standards for elimination of nonpoint sources of pollution and promote the following: reducing risk to life and property from flooding through floodplain management regulations; participating in FEMA flood insurance programs; participating in the Napa River flood control project; maintaining City dams in a safe condition; and, preparing a City Storm Drainage Plan with specific hydrologic and water quality information and recommendations. The proposed project has provided detailed analyses and programs to identify how water quality and flooding impacts are avoided and/or minimized.

<b>1. Setting</b>
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a. Climate. The climate of the Napa area is characterized as Mediterranean, with cool wet winters and warm dry summers. The mean annual rainfall in the vicinity of the project site, the majority of which falls between October and April, is approximately 23 inches (City of Napa, 1987; and Rantz, 1971). Analysis of long-term precipitation records indicates that wetter and drier cycles lasting several years are common in the region. Severe, damaging rainstorms occur at a frequency of about once every three years (Brown, 1988).

b. Regional Drainage and Flooding. The project site is located adjacent to the Napa River and is entirely within the Napa River watershed, which drains an area of 426 square miles (PWA, 1997). The Napa River originates just north of Calistoga and flows to the south through the Napa Valley to San Pablo Bay. The river is tidally influenced (water levels in the river rise and fall with the tides in San Pablo Bay) between its mouth at San Pablo Bay and Trancas Street upstream of the City of



Napa (PWA, 1997). The Napa River receives discharge from numerous tributaries along its length. The tributaries drain undeveloped, agricultural, and urban land uses. The focus of urban development is along the SR 29 corridor (roughly parallel to the river), particularly within the cities of Napa and Vallejo.

Flooding along the Napa River is a persistent problem since a significant amount of development has occurred within the natural flood plain of the river (Figure IV.E-1). Damaging flood events occurred, on average, more than once every four years between 1900 and 1967 (USGS, 1977). However, between 1967 and 1997, damaging floods have occurred approximately once every two years (based on review of records) (USGS, 1977; PWA, 1997; Wadsworth, 1997). The early 1980s and mid-1990s were periods of particularly frequent and damaging floods, with major events occurring in 1981, 1982, 1983, 1986, 1995, 1996, and 1997. The 1986 peak discharge, the largest on record, was estimated at 37,100 cubic feet per second (cfs) at Oak Knoll.<sup>1</sup> This discharge corresponds to the 50-year event (likely to occur once in any given 50-year period) (Wadsworth, 1997). Even though the Lowlands portions of the project site and off-site areas up and downstream flood on a regular basis causing significant damage to some off-site areas, the 100-year flow event in the Napa River (estimated at 41,000 cfs) has not occurred since gauging of the river began in 1900.

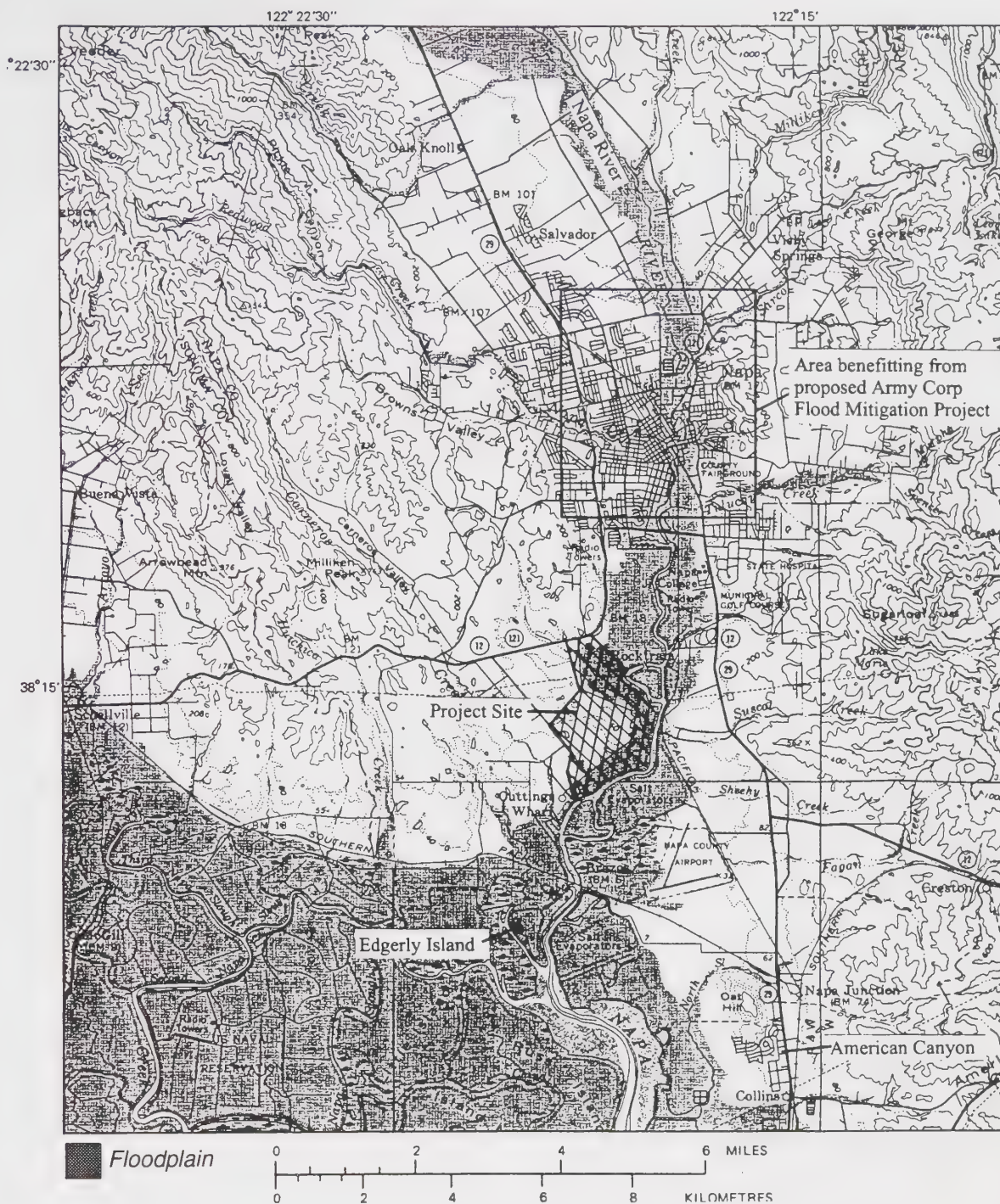
The U.S. Army Corps of Engineers (Corps) has prepared a plan to alleviate some of the flooding problems along the Napa River.<sup>2</sup> As part of the Corps review of existing hydrology and hydraulics, it has been determined that the original FEMA base flood elevations for the Napa River may be underestimated by approximately one foot south of Imola Avenue. (Bowers, 1997). This new estimate of base flood elevations results in expansion of the estimated area susceptible to inundation during the 100-year flood relative to the areas shown on FEMA Flood Insurance Rate Maps (FIRMs). The proposed Corps project would alleviate flooding problems in downtown Napa by widening the river through the lowering of selected levees between Imola Avenue and Trancas Street<sup>3</sup> to improve flood water conveyance. The proposed flood control project, if implemented, would not provide flood relief for areas within the Napa River flood plain south of Imola Avenue (Wadsworth, 1997). Developed areas south of the proposed Corps project that would remain susceptible

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<sup>1</sup> The Oak Knoll river gauging station is located approximately five miles upstream of the City of Napa on the downstream side of the Oak Knoll Avenue bridge.

<sup>2</sup> An Environmental Impact Report/Environmental Impact Statement (EIR/EIS) on the proposed flood control project was released to the public around 15 December 1997. A sales tax measure to implement the flood control project passed in March 1998.

<sup>3</sup> Although shown on Geological Survey maps as Tranca Road, and sometimes referred to as Trancas Avenue, the official city name is Trancas Street.





to floods of lesser magnitude than the 100-year event include the Lowlands of the project site, Edgerly Island, and the City of American Canyon (Wadsworth, 1997). Edgerly Island is susceptible to flooding during the 10-year storm event and represents the most vulnerable development to flooding downstream of the project site. Development on Edgerly Island consists of 142 structures, most of which are residential. The Corps determined that it was not economically feasible to provide additional flood protection for Edgerly Island, and the island therefore was not included in the ongoing Napa River flood mitigation project.

c. Site Drainage. The entire project site drains into the Napa River. The project site can be divided into two hydrologic subareas (Figure IV.E-2): 1) the Highlands in the central southwest (approximately 475 acres), and 2) the relatively flat Lowlands to the north and east (approximately 443 acres).

(1) Upland Highlands Hydrology. The hilly Highlands are typical of coast range foothills, characterized by gently sloping hills and intervening swales, and consist of several small watersheds or drainage subareas. These upland subareas drain to the flat Lowlands to the west prior to discharge to the Napa River. The maximum elevation of the upland area (at Home Hill) is approximately 74 feet above the National Geodetic Vertical Datum (NGVD) (USGS, 1980). In addition to the runoff generated at the project site, additional runoff from off-site areas drains through the site. These watersheds, ranging in size from 415 to 1,960 acres, drain agricultural (vineyards and cattle grazing) and undeveloped lands north of the site (Ruggeri-Jensen-Azar & Associates, 1997). Therefore, on-site drainage facilities convey a considerable amount of runoff from upstream areas where management of the volume and quality of runoff is beyond the control of the project site owners.

(2) Lowlands Hydrology. The Lowlands areas are part of the Napa River flood plain and subject to frequent flooding. Prior to the influence of humans, the project site Lowlands consisted of tidal wetlands at an elevation of about 3.0 to 3.7 feet NGVD (PWA, 1997). To allow the site to be used for agricultural purposes, levees were built along the current location of the west bank of the river, and drainage channels, discharging to the Napa River through one-way gated culverts, were installed to drain the Lowlands. The levees were not designed or built in accordance with current engineering requirements for levee construction, but rather consist of uncompacted fill resting on dredge spoils (PWA, 1997). The current elevation of the levees is estimated to range in height from 5.0 to 7.0 feet NGVD. The current condition of the levees is poor. On a site reconnaissance conducted on 18 September 1997 by the EIR authors, portions of the levee along the Southern Lowlands were observed to have near-vertical, fresh failure scarps on the river side and minimal freeboard in many areas.





Source: EDAW, 1997.

# STANLEY RANCH

SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT

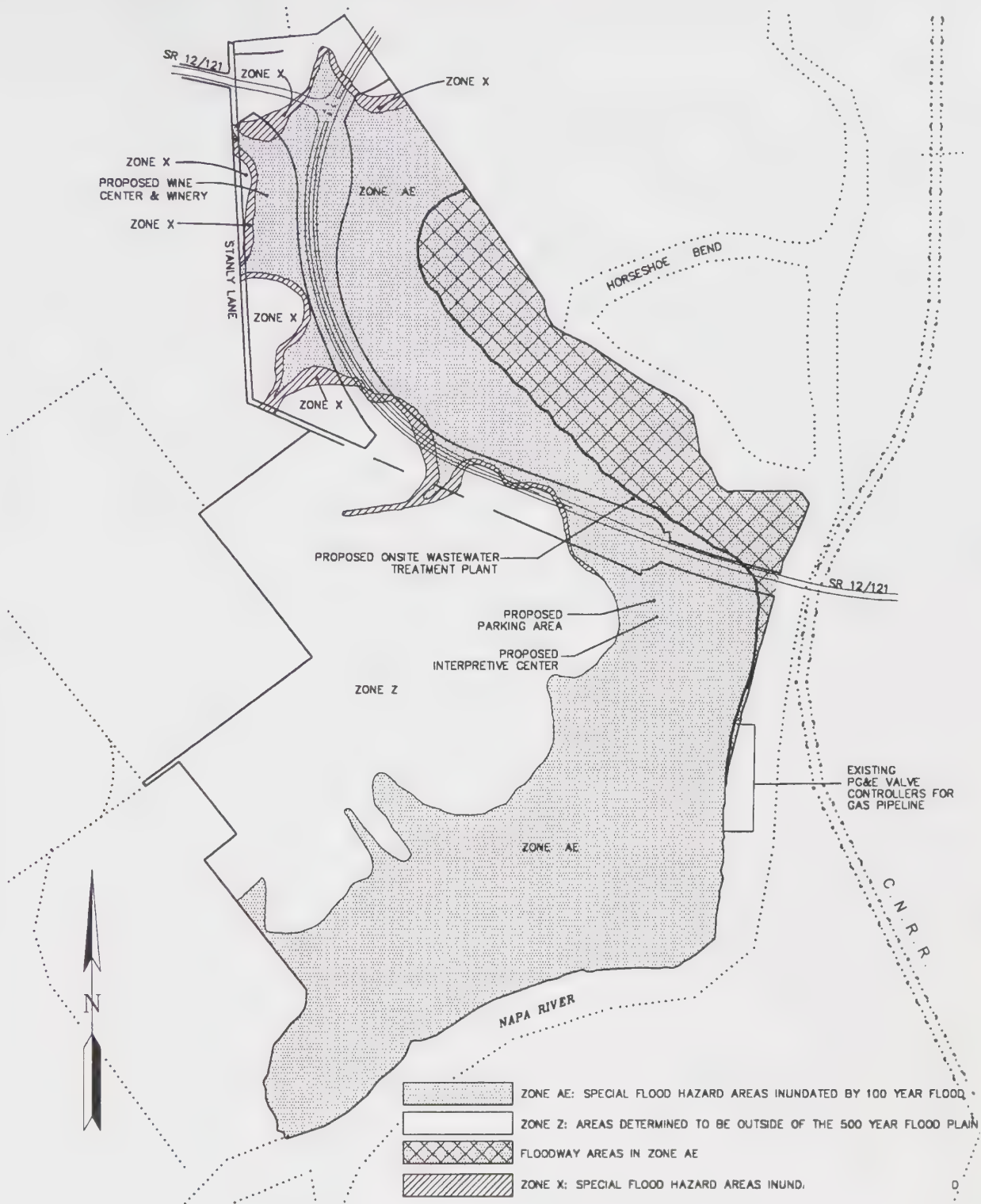
Figure IV.E-2  
Site Hydrology

Placement of the levees resulted in the drying of the highly organic soils, causing oxidation and wind erosion of the peats and compaction of the clay soils. These processes resulted in subsidence of the Lowlands to their current elevation of approximately -0.5 to +0.5 foot NGVD south of State Highway 29 and +1.0 to +2.0 feet NGVD north of SR 29. The reduced elevation of Lowlands south of State Highway 29 is lower than the mean tide level (0.67 foot NGVD) of the Napa River adjacent to the project site (PWA, 1997). Therefore, drainage can only occur from the Southern Lowlands at low tide. The Northern Lowlands can drain when the river is at, or below, mean tide levels. If storm water runoff from the project site and off-site drainages discharges to the Lowlands during mean tide level or high tide, water backs up at the levees because water levels in the river are higher than in the Lowlands.

d. Site Flooding. The Lowlands of the project site are subject to frequent flooding. Much of the Lowlands would flood on a daily basis if the levees along the Napa River were not present (from tidal activity in the river). The levees, which were not constructed in accordance with current engineering practices, are not recognized as reliable flood protection features (Kambe, 1997). The Lowlands at the project site flood during relatively small storms, typically from drainage backing up at outlets to the river (levee overtopping occurs during moderate to large storms).

The 100-year flood hazard zone, as mapped by FEMA, is shown on Figure IV.E-3 (FEMA, 1988). In addition, a portion of the Northern Lowlands adjacent to Horseshoe Bend is designated as part of the flood way. The flood way is that part of the flood zone considered to be the zone of highest hazard and is reserved for the passage of larger floods. Placement of fill in the flood way is not permitted because it could cause an increase in base flood elevations greater than one foot. Recent work conducted by the Corps indicates that the FEMA 100-year base flood elevations may underestimate flooding conditions along the river. The revised Corps 100-year flood hazard inundation levels may be up to one-foot higher than those estimated by FEMA (Figure IV.E-3) (Dacus, 1997).

(1) Dam Failure. Significant flooding of the project site Lowlands could occur if catastrophic dam failure were to occur at one of the City's reservoirs (ABAG, 1980; City of Napa, 1986). Lake Hennessey on Conn Creek is the largest of the reservoirs (with a capacity of 31,000 acre-feet) that could affect the project site if the dam were to fail catastrophically. Based on a 1986 Seismic Stability Evaluation of Conn Creek Dam, inundation waters would reach the northern city limits within 4.5 hours with a 16-foot maximum wave height at Trancas Street (City of Napa, 1986). The Napa River flood plain widens between the northern city limits and the project site, and therefore, the wave heights would decrease before reaching Stanly Ranch. The City of Napa *General Plan* includes policies designed to mitigate potential risks to inhabitants and damages to property. These policies focus on



Note: Plan elements are approximate sizes and locations. Further adjustments will occur at the Tentative Map Phase.

SOURCE: EDAW, 1997 AND BRADY/LSA, 1997.

# STANLEY RANCH

## SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT

Figure IV.E-3  
FEMA Floodplain Map

BRADY ■ LSA  
PLANNERS AND LANDSCAPE ARCHITECTS



cooperation with regulatory agencies to conduct dam inspections, regular dam maintenance, and completion of structural improvements, as needed. Proper maintenance of the dams should reduce the potential for catastrophic failure to a less-than-significant level.

(2) Coastal Flooding Hazards. The elevation of the Northern and Southern Lowlands of the project site (near or below mean sea level) and its proximity to the tidally-influenced Napa River may allow the site to be inundated by coastal hazards, such as tsunamis, extreme high tides, or sea level rise.

(a) *Tsunamis*. A tsunami is a sea wave produced by an offshore earthquake, volcanic eruption, or landslide (Steinbrugge, 1982). Tsunamis are difficult to observe in the open ocean because they have relatively low wave heights (typically less than ten feet) and travel very fast (up to 500 miles per hour) (Costa and Baker, 1981). Tsunamis can be exceedingly destructive upon reaching exposed coastlines, where they are capable of rising to 100 feet in height and moving at 30 miles per hour. The San Francisco Bay and its tidally-influenced tributaries are partially protected from inundation and damage associated with tsunamis because of the restricted hydraulic access at the Golden Gate. Wave energy that enters the mouth of the Gate would be expected to attenuate as it moves into the open water of the Bay (Ritter and Dupre, 1972). Wave runup heights for the 100-year tsunami event have been calculated for coastal areas within the Bay, and are predicted to be less than 3.3 feet NGVD for the Napa River near the project site (Garcia and Houston, 1975).

(b) *Extreme High Tides*. Extreme high tides in the San Francisco Bay result from the combined effects of astronomical high tides (related to the lunar cycle) and other factors including winds, barometric pressure, ocean temperatures, and freshwater runoff (USACE, 1989). In California, highest astronomical tides occur in the summer and winter, and therefore extreme high tides occur during these times. The highest tide ever recorded in the San Francisco Bay (between 1855 and 1983) occurred on 3 December 1983 (USACE, 1989). Based on the 129-year record of daily high tide, the Corps has developed an estimated 100-year high tide elevation for various locations within the Bay. The estimated 100-year high tide at the project site is expected to reach elevation 6.4 feet NGVD in the Napa River at Mare Island (south of the project site) (USACE, 1984). Therefore, areas of the project site with elevations below 6.4 feet NGVD, and not protected by levees or similar features, could be inundated during an extreme high tide event.

(c) *Sea Level Rise*. Tidal gauge measurements collected over the last 100 years indicate that sea level is rising relative to the land surface in many locations throughout the world (BCDC, 1987). Over the last 100 years, the temperature of the earth's surface has risen approximately 0.6° Celsius (USEPA,

1995). It is widely believed that sea level will continue to rise in response to global warming. Global warming causes thermal expansion of the upper layers of the ocean (increasing the volume of water) and melting of the earth's glaciers and polar ice fields. Such increases in sea level, if sustained over long periods of time, could create flooding problems (or exacerbate existing problems) for those areas currently protected from flooding with only minimal freeboard. To plan for, and mitigate, potential flooding problems associated with sea level rise, it is important to be able to quantify the amount of sea level rise expected at a specific location over a given time period. Long-range projections of the behavior of physical systems is extremely difficult because of the uncertainties involved. Since the U.S. Environmental Protection Agency (EPA) released their first major study on sea level rise in 1983 (USEPA, 1983), estimates for amount of predicted sea level rise have steadily decreased (Table IV.E-1). EPA's most recent prediction for the expected total sea level rise in the San Francisco Bay is one foot by the year 2100 (USEPA, 1995). The effect of sea level rise would decrease with distance up the Napa River as the influence of the tide on the river diminishes (at some location on the river, sea level has no direct effect on water levels in the river) (Dacus, 1997).

The amount of sea level rise at the site has not been quantified, but based on current estimates, would be less than one foot by the year 2100.

Those portions of the project site below elevation 7.4 feet NGVD<sup>4</sup> (elevation of extreme high tide added to predicted sea level rise by the year 2100) and not protected by levees or other similar features could be subject to increased flooding hazards as time progresses.

e. Water Quality. The quality of surface water and groundwater at the project site is affected by land uses within the watersheds that drain through the site and the composition of geologic materials. Drainage from the site (and off-site, upstream areas) could contribute to the quality of water in drainages downstream and the San Pablo Bay.

Water quality in surface and groundwater bodies is regulated by the State and Regional Water Quality Control Boards. The project site is under the jurisdiction of the San Francisco Bay Regional Water Quality Control Board (RWQCB), which is responsible for implementation of State and Federal water quality protection guidelines in the vicinity of the project site. The RWQCB implements the Water Quality Control Plan (Basin Plan), a master policy document for managing water quality issues in the region (San Francisco RWQCB, 1995). The Basin Plan establishes beneficial water uses for waterways and water bodies within the region.

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<sup>4</sup> In general, these areas are located within the Northern and Southern Lowlands.

**Table IV.E-1**  
**CLIMATE CHANGE CONTRIBUTION TO SEA LEVEL RISE**

<b>References</b>	<b>Highest Probability Estimate for Year 2100 (inches)</b>
United States Environmental Protection Agency (EPA), 1983, <i>Can We Delay Greenhouse Warming?</i> , authors: Seidel, S., and Keyes, D.	69
National Academy of Sciences (NAS), 1983, <i>Changing Climate</i> . Washington, DC: National Academy Press	69
National Research Council (NRC), 1987, <i>Responding to Changes in Sea Level</i> . R.G. Dean, Chairman. Washington, DC: National Academy Press	39
Intergovernmental Panel on Climate Change (IPCC), 1990, <i>Climate Change: The IPCC Scientific Assessment</i> . Cambridge and New York: Cambridge University Press.	26
Wigley, T.M.L., and S.C.B. Raper, 1992, "Implications for Climate and Sea Level of Revised IPCC Emissions Scenarios." <i>Nature</i> 357:293-300.	19
U.S. EPA (1995)	13

Source: United States Environmental Protection Agency (EPA), 1995, *The Probability of Sea Level Rise*, EPA 230-R-95-008, October.

Designated beneficial uses for the Napa River include: agricultural supply; cold and warm freshwater habitat; fish migration, municipal and domestic supply; navigation, preservation of endangered species; contact and noncontact water recreation; fish spawning; and wildlife habitat. Designated beneficial uses of groundwater of the Napa Valley include municipal and domestic water supply; industrial process water supply; industrial service water supply; and agricultural water supply.

(1) Surface Water. The most extensive database on water quality in the Napa River near the project site is maintained by the Napa Sanitation District, which operates the Suscol Treatment Plant across the river to the east of the site. The Plant is permitted for, and conducts, winter (November 1 to April 30) river discharges of treated wastewater. The hydraulic capacity is 15.4 million gallons per day (mgd) (Maglione, 1997). The Plant staff collects and analyzes water quality samples on a monthly basis at five locations in the Napa River near the site (Appendix F). The data from the winter of 1996 indicate that water quality upstream and downstream of the discharge outfall meets or exceeds most Basin Plan water quality objectives (including temperature, pH, dissolved oxygen, turbidity, and un-ionized ammonia as



nitrogen). Total coliform objectives were exceeded during the monitoring period. Coliform bacteria, which are a natural part of the microbiology of the intestinal tract of warm-blooded mammals, including human beings, are used as an indicator of bacterial contamination of water. It is unlikely that the Plant is responsible for the exceedance since treated wastewater is monitored for coliform and met discharge requirements prior to discharge (Maglione, 1997). The tabulated water quality data for the winter of 1996 is included in Appendix F. Typical agricultural and urban pollutants (e.g., pesticides and heavy metals) that may be present in the Napa River are not monitored by the Plant.

Detailed water quality monitoring within the greater San Francisco Bay is conducted by the San Francisco Estuary Institute (SFEI). The nearest sampling station to the project site is near the mouth of the Napa River at Vallejo. Relative to the other 24 sampling stations within the Bay, the Napa River station has exhibited relatively few exceedances of water quality objectives (SFEI, 1997). Exceedances of water quality objectives for copper and PCBs have been identified.

Surface water occurs within the boundaries of the project site in the several unnamed creeks and in low-lying wetland areas (see Figure IV.E-2). Water quality monitoring data for these surface water features are not available. However, it is expected that water quality in the creeks is affected by agricultural, and to a lesser extent, urban land uses in the watershed. Past and current agricultural practices may contribute increased nutrient loading and residual pesticides to the creeks and Napa River. Leaks of fuel or lubricants, tire wear, and fallout from exhaust contribute petroleum hydrocarbons, heavy metals, and sediment to the pollutant load in runoff being transported to receiving waters; residues of these substances could be incorporated into the runoff from the site and upstream areas and be discharged to the Bay.

(2) Groundwater. The Napa Valley groundwater basin occupies a northwest/southeast-trending structural depression in the California Coast Ranges. From the upper reaches of the basin near Calistoga to the City of Napa, the aquifer materials of the basin are composed of alluvial fans (formed from sediment washing down from upland areas) bounded by terraces and the foothills of the Coast Ranges. South of the City of Napa, the alluvial fans merge with the marsh deposits of the San Pablo Bay. Groundwater in the basin flows from northwest to southeast (DWR, 1995). Groundwater quality data for the Napa Valley are limited and mostly collected prior to 1973. A survey of water quality in the Napa Valley was conducted by the US Geological Survey in 1973 and concluded that groundwater was, in general, of good quality but with high levels of sodium, boron, chloride, and iron (City of Napa, 1996).

Groundwater occurs at various depths in the vicinity of the project site. Two water wells monitored by the US Geological Survey and Department of Water Resources are located near the project site (DWR, 1995). One well, located near the northwest uplands of the site, indicates an average depth to groundwater of approximately 40 feet below the surface. The second well is located approximately one-half mile west of the South Lowlands and indicates an average depth to groundwater of less than ten feet. The applicant installed shallow monitoring wells to determine the depth to groundwater in and near drainage features (PWA, 1997). The investigation indicated that groundwater occurs year round in sediments underlying creeks and drainages, with an average depth of one to eight feet below the surface. Groundwater quality data for the project site were not available.

## **2. Impacts and Mitigation Measures**

- a. Criteria of Significance. The *Draft SRSP* would be considered to have significant adverse water quality or hydrologic impacts if development permitted by the *Draft SRSP* would cause:
- An increase in calculated peak flood discharges to the Napa River;
  - Exposure of life and property to increased flood hazards as defined by the Federal Emergency Management Agency (FEMA) or the U.S. Army Corps of Engineers (Corps);
  - Substantial degradation of water quality (including siltation from erosion), pursuant to CEQA Guidelines, Appendix G (f and q);
  - Substantial interference with groundwater recharge, pursuant to CEQA Guidelines, Appendix G (l); and
  - Destruction of natural drainage ways.
- b. Less-Than-Significant Impacts. Implementation of the *Draft SRSP* is not expected to result in significant impacts to groundwater recharge, natural drainage ways, or flooding associated with coastal hazards (i.e., tsunamis, extreme high tides, sea level rise). Discussion of the rationale for designation of these potential impacts as less than significant, without mitigation, is presented below.

Groundwater recharge can be impacted by development if a substantial amount of new connected impervious surfaces are constructed at an undeveloped site. Infiltration of precipitation is the mechanism by which groundwater recharge occurs at the site. The *Draft SRSP* incorporates a relatively new approach to storm water runoff management, infiltrating as much precipitation into the ground as is feasible. Development allowed by the *Draft SRSP* would accomplish a high degree of infiltration by the use of a variety of infiltration and water retention features,

including porous pavement for walkways, patios, and overflow parking areas. All roof drainage would be routed toward infiltration areas rather than to street drainage systems. Treatment ponds, wetlands, and biofilter swales would allow a greater degree of infiltration than standard storm water conveyance systems. It is expected that under fully developed conditions, more runoff would leave the site during severe storms<sup>5</sup> than under existing conditions. However, less runoff would leave the site (and infiltrate into the ground) during frequent storms because of the detention basins incorporated into the design of the project. The detention basins would capture and hold precipitation from small storms and allow it to infiltrate. The *Draft SRSP* is expected to have a less-than-significant impact on groundwater recharge.

Implementation of the *Draft SRSP* would not result in destruction of natural drainage ways. The Illustrative Master Plan map (8 September 1997) (see Figure III-4) indicates that existing established drainage ways (designated "blue line" creeks on the USGS topographic maps) and other minor tributaries would not be destroyed. The *Draft SRSP* is therefore expected to have a less-than-significant impact on natural drainage ways.

Implementation of the *Draft SRSP* is not expected to expose people or property to flooding associated with tsunamis, extreme high tides, or sea level rise. The maximum expected inundation level associated with tsunamis and extreme high tides at the project site would be significantly lower than inundation levels associated with the estimated 100-year storm event. Project improvements would, at a minimum, be constructed with finished floor elevations of one foot above the 100-year flood level elevation<sup>6</sup> (and therefore would be more than one foot above the inundation level of the 100-year tsunami and high tide). Some development would occur within the flood plain where fill would be required.

Sea level rise is estimated to be less than one foot at the project site by the year 2100. If this prediction were realized, by the year 2100, all potential flood-related inundation depths may be incrementally increased. Of the identified flood hazards, storm-related flooding is predicted to result in the highest inundation level at the project site. The City of Napa Municipal Ordinance requires an adequate buffer against predicted sea level rise; finished floor elevations must be constructed at least one foot above base flood elevations. This measure would provide adequate mitigation to minimize flooding damage if sea level were to rise by one foot.

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<sup>5</sup> Storms with an expected recurrence interval of greater five years.

<sup>6</sup> In accordance with City of Napa Zoning Ordinance, Chapter 17.62.070.



***Impact HYDRO-A: Increased runoff resulting from creation of new impervious surfaces could leave the site, potentially exacerbating existing flooding problems upstream and downstream on the Napa River. Given the project's current design, this impact would be less than significant. (LTS)***

Development of the project site, particularly areas proposed for residential development, would result in an increase in the amount of impervious surfaces (buildings, paved roadways and driveways). Undeveloped, vegetated lands generally have low runoff coefficients, meaning that they yield a relatively small portion of the total rainfall as runoff. The majority of the precipitation, particularly in smaller storms, infiltrates into the subsurface. Impervious surfaces yield nearly all rainfall as runoff. Increased runoff volume could result in an increase in the frequency and depth of flood flows along the Napa River. The area most susceptible to flooding along the Napa River that potentially could be affected by the proposed project is the residential community at Edgerly Island (approximately two miles downstream of the project site). Under existing conditions, Edgerly Island floods during a 10-year (or larger) storm.

Two factors should be considered when evaluating the potential of the proposed project to exacerbate existing flooding problems along the Napa River: 1) the increase in volume of runoff from the project site, and 2) the timing of the release of runoff from the project site relative to peak flood flows in the Napa River during a storm event. For example, a project that would generate a large increase in runoff that coincided with the flood peak in the Napa River would cause a greater impact on flooding than a project that generated a relatively small increase in runoff volume that did not coincide with the flood peak in the Napa River.

(1) Increase in Runoff Volume. Each storm event that generates runoff causes a peak flow in the creeks and rivers draining the basin. Peak runoff from the project site under existing and developed conditions was determined for the 10-year, 50-year, and 100-year storm events (PWA, 1997). The peak runoff values were determined using the HEC-1 hydrologic model,<sup>7</sup> and are summarized in Table IV.E-2.

Characteristics of the "design storm" or typical storm event for the area were established using the City of Napa and Napa County Flood Control District guidelines to calculate the intensity and rainfall depth expected for the design 10-year, 50-year, and 100-year storm events. Existing site conditions were determined from topographical maps (sub-basin delineation) and Soil Conservation Service mapping (infiltration potential of project site soils). For the developed

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<sup>7</sup> HEC-1 is the most widely used storage routing model in the United States (Maidment, 1993).

**Table IV.E-2**  
**PEAK DISCHARGE FROM PROJECT SITE**

Storm Event Frequency	Peak Discharge Under Existing Conditions (cfs)	Peak Discharge Under Proposed Conditions (cfs)
10-year	1,295	1,302
50-year	2,100	2,107
100-year	2,459	2,466

Notes: cfs = cubic feet per second.

Source: Philip Williams and Associates, 1997.

condition, the proposed, directly-connected impervious surfaces were added to the model to determine the increase in peak runoff. The results of the modeling indicate that the increase in runoff volume at the peak during the design storm events is 7.0 cubic feet per second (cfs).

(2) Time to Peak Runoff. Each drainage basin responds to a storm differently. Large, gently-sloping drainage basins are generally characterized as having longer lag times between the onset of rainfall and peak flow in the river system than small steep basins. Peak discharge in the Napa River at the SR 12/29 bridge (adjacent to the project site) for the 100-year storm event is 45,710 cfs and is expected to occur 19.66 hours after the onset of rainfall. The peak increase in discharge from the project site is expected to occur 12.33 hours after the onset of rainfall. Discharge resulting from the increase in runoff from development at the project site would have been decreasing for 7.33 hours when the peak flow in the Napa River occurred. The contribution to peak flow in the Napa River resulting from on-site development is calculated to be 1.06 cfs. Based on a Corps rating curve for Edgerly Island, the 1.06 cfs increase in the peak flow in the Napa River would raise the 100-year flood elevation at Edgerly Island by 0.00002 feet (PWA, 1997). For purposes of comparison, this increase in the elevation of the flood water is approximately equivalent to one-tenth of the diameter of a human hair. This increase in flood water elevation is considered to be less than a reasonable *de minimis* amount, and is therefore, less than significant.

An important component to the less-than-significant designation for increase in flood water elevation is that runoff volume from the developed project site does not increase significantly relative to existing conditions. *The Stanly Ranch Specific Plan Technical Appendix: Water Quality Management* report (PWA, 1997) specifies that directly connected impervious surfaces would be minimized by directing landscaping, patios, and roof drainage to infiltration trenches prior to discharge to street drains. In addition, the HEC-1 modeling completed for the project site assumed that these drainage features designed to encourage infiltration were part of

the completed project. Therefore, it is important that these drainage features are included in the final design. The following mitigation measure is designed to ensure that the final project design, as it relates to surface water runoff, is similar to the design used in the hydrology analysis.

Condition of Approval HYDRO-A: The following combination of measures shall be included as Conditions of Approval for the proposed project:

- The proposed project shall not result in more than a 0.0003 feet increase in peak Napa River flood elevations at the site (corresponding to a 0.00002 foot increase at Edgerly Island) for the 10-, 50-, or 100-year storm event. If significant changes occur to the development plan relative to the conditions used in the hydraulic modeling, the applicant shall rerun the model using the final development plan conditions. The Public Works Department shall review the final development plans (and any model reruns) to ensure that quantitative peak flood increase limitations have not been exceeded.
- The Public Works Department shall review the final development plan to ensure that the project includes measures to minimize the amount of connected impervious surfaces. Wherever possible, the applicant shall direct roof runoff to infiltration trenches or vegetated areas prior to discharge to the storm drain system and non vehicle-related paved surface shall be constructed with a porous material. If site conditions render these mitigation measures infeasible in particular situations (e.g. unfavorable geotechnical conditions), the applicant shall submit a written explanation and request for waiver to the Public Works Department. The waiver must be approved by the Public Works Department prior to approval of the grading and drainage plan.
- The applicant shall submit a drainage plan designed in accordance with the City of Napa Standard Specification for the Public Works Department review and approval. In addition, since the project includes excavation and fill in the flood hazard zone of the Napa River, the applicant shall submit Certifications of Compliance (prepared by a civil engineer) to the Public Works Department at the times set forth in Chapter 17.62 of the Napa Municipal Code. (LTS)

c. Significant Impacts. The following impacts would be significant.

**Impact HYDRO-1: Placement of fill within the flood plain could increase flood elevations, exacerbating existing flooding problems along the Napa River. (S)**

The *Draft SRSP* proposes placement of fill within the flood plain at several locations, including the wine center and winery, Environmental Interpretative



Center, employee parking lot and some residential neighborhoods (Ruggeri, Jensen, Azar & Associates, 1997). Placement of fill within the flood plain effectively removes flood water storage space during flooding events, causing an increase in flood level elevations. Increases in flood elevations could result in an increase in damage associated with flooding events. To mitigate this potential impact, the *Draft SRSP* has been revised to include a cut and fill balance within the floodplain (Ruggeri, Jensen, Azar & Associates, 1997). However, the final project may require changes to the latest draft grading plan, resulting in a cut/fill imbalance.

Mitigation Measure HYDRO-1: No net increase in fill within the Corps-designated flood plain shall be permitted in any phase of the project or for the project as a whole. Any placement of fill within the flood plain shall be mitigated by removal of an equal or greater amount of material from the flood plain in a different location. Prior to approval of the final grading plan, the applicant shall quantify the amount of fill proposed for placement (and removal) in the flood plain. The City of Napa shall not approve the final grading plan unless the applicant has demonstrated that the "no net fill" in the flood plain criterion has been met. Under no circumstance shall fill be placed in the flood way without express authorization of the City of Napa Public Works Department. (LTS)

**Impact HYDRO-2: Construction activities and post-construction site uses could result in degradation of water quality in nearby surface water bodies by reducing the quality of storm water runoff. Habitat could also be degraded due to sedimentation in wetlands. (S)**

(1) Construction-Period Impacts. Construction and grading within the project site would require temporary disturbance of surface soils and removal of vegetative cover. During the construction period, grading and excavation activities would result in exposure of soil to runoff, potentially causing erosion and entrainment of sediment in the runoff. Soil stockpiles and excavated parcels on the project site would be exposed to runoff and, if not managed properly, the runoff could cause erosion and increased sedimentation in water courses at or away from the project site. The accumulation of sediment could result in blockage of flows, potentially resulting in increased localized ponding or flooding.

The potential for chemical releases is present at most construction sites. Once released, substances such as fuels, oils, paints, and solvents could be transported to nearby surface waterways and/or groundwater in storm water runoff, wash water, and dust control water, potentially reducing the quality of the receiving waters.

(2) Operation-Period Impacts. New construction and intensified land uses at the project site would result in increased vehicle use and potential discharge of associated pollutants. Leaks of fuel or lubricants, tire wear, and fallout from exhaust contribute petroleum hydrocarbons, heavy metals, and sediment to the pollutant load in runoff being transported to receiving waters. Runoff from the proposed orchard, vineyards, and common landscaped areas may contain residual pesticides and nutrients. Long-term degradation of water quality runoff from the site could impact water quality in on-site wetlands, the Napa River, and the San Pablo and San Francisco Bays.

A new 18-hole golf course is included in the design of the *Draft SRSP*. Depending on the selected alternative, the proposed golf course may be irrigated by reclaimed water from an on-site wastewater treatment plant or from the Napa Sanitation District's Suscol Treatment Plant. Repeated application of reclaimed water on the golf course (and other common landscaped areas) could result in nitrate loading, potentially affecting groundwater quality. Reclaimed water would likely contain salt levels, which could accumulate in shallow soils, reducing permeability. Decreased permeability could increase storm water runoff volumes (impacting flooding) and affect health of turf grass. In addition, reclaimed water may contain heavy metals that could accumulate in project site soils.

Improper golf course design and management practices can cause runoff to contain significant amounts of nutrients and pesticides. Nitrogen from fertilizers (nitrogen-based fertilizers are used on golf courses to encourage turf grass growth and regeneration) and pesticide compounds may also leach through soil layers and contact groundwater. Additionally, beneficial nontarget soil organisms, wildlife, and aquatic systems may be exposed to pesticides.

(3) Regulatory Framework. Runoff water quality is regulated by the Federal National Pollution Discharge Elimination System (NPDES) Nonpoint Source Program (established through the Clean Water Act); the NPDES program objective is to control and reduce pollutants to water bodies from nonpoint discharges. The Program is administered by the California Regional Water Quality Control Boards.

Projects disturbing more than five acres of land during construction are required to file a Notice of Intent (NOI) with the RWQCB to be covered under the State NPDES General Construction Permit for discharges of storm water associated with construction activity. A developer must propose control measures that are consistent with the State General Permit. A Storm Water Pollution Prevention Plan (SWPPP) must be developed and implemented for each site covered by the general permit. A SWPPP should include Best Management Practices (BMPs) designed to reduce

potential impacts to surface water quality through the construction and life of the project.

If reclaimed water from an on-site treatment plant or off-site Napa Sanitation District treatment plant were used to irrigate the golf course and landscaped areas, the discharger would be required to apply for, and receive, an authorization for discharge from the RWQCB. The RWQCB would establish Waste Discharge Requirements (WDRs) which specify final effluent water quality criteria. The WDRs are designed to protect human health and the environment based on the proposed disposal method or use of the water.

(4) Measures Included in the *Draft SRSP*. A conceptual Water Quality Management Plan for the *Draft SRSP* has been developed (Appendix F) by the applicant. The conceptual plan effectively incorporates a wide array of source control and treatment control BMPs into the *Draft SRSP*. In addition, the Water Quality Management Plan states that an Integrated Pest Management Plan (IPMP), and Chemical Application Management Plan (CHAMP) would be prepared, and that water quality monitoring would be conducted.

Source control BMPs, which are those that focus on elimination of potential sources of water pollution before they occur, proposed by the project include the following (for the complete list, refer to Appendix F):

- Stream erosion control measures (use of energy dissipaters at discharge points);
- Education of residents by property owners association regarding storm water quality protection;
- Use of native vegetation (maintained by efficient irrigation systems) to minimize requirements for fertilizers and pesticides;
- Labeling of storm drains with "No Dumping-Drains to Bay";
- Use of porous paving (which allows infiltration) for walkways, patios, and overflow parking areas;
- Minimal connections of impervious surfaces (e.g., roofs) to street drains to encourage infiltration of runoff;
- Regular street sweeping;
- Construction of a common car wash area for use in the employee housing area;
- Use of cover crops in the vineyard and orchard to minimize the need for pesticides.



Treatment control BMPs, which are those that focus on removal of pollutants from storm water, proposed by the project include the following (for the complete list, refer to Appendix F):

- Construction of treatment ponds (detention basins with a permanent water pool), designed to settle out sediment and provide treatment of pollutants with aquatic plants;
- Construction of biofilter swales (broad shallow vegetated channels), designed to settle out sediment and provide treatment of pollutants with grasses and thatch;
- Focused treatment of runoff from golf course green areas, which typically receive more intensive management (application of more fertilizers and pesticides).

The conceptual Water Quality Management Plan proposes preparation of a detailed maintenance plan that would be prepared prior to construction of the project and would include an inspection schedule and list of maintenance activities for the treatment control BMPs (e.g., vegetation control in swales, sediment removal from detention basins). The applicant predicts that 2,000 to 3,000 cubic yards of sediment would need to be removed from the detention basins and other treatment control BMPs every three to five years. The sediment may contain contaminants that would render it a hazardous waste or represent a health risk to the public. Proper handling of the sediment would require knowledge of its chemical characteristics obtained by sample collection and analysis. It is proposed that sediment accumulated in detention structures be sampled annually for a period of five years. If, after five years, sediment sampling indicates that on-site reuse would be appropriate, sampling would be discontinued.

The conceptual Water Quality Management Plan proposes preparation of an IPMP designed to reduce pesticide application and minimize the environmental impacts associated with pesticide use at the golf course. The IPMP would include criteria for selecting effective pesticides that pose the least threat to the environment, and specify application methods and criteria. The conceptual plan does not indicate that the IPMP would cover the orchard, vineyards, or common landscaped areas.

The conceptual Water Quality Management Plan proposes preparation of a CHAMP for the golf course and landscaped areas (excluding the orchard or vineyard), that would be reviewed and approved by a "water quality specialist engineer or other California-registered professional with appropriate expertise" prior to beginning construction. The CHAMP would include the following elements (for the complete list, refer to Appendix F):

- Assessment of potentially affected habitat;
- Quantification of chemical loading, including potential loading of nitrates and salts from application of reclaimed water on the golf course;
- Identification of applicable regulations and permit requirements;
- Integration of golf course design with urban runoff storm water quality plan;
- Monitoring and reporting recommendations.

The conceptual Water Quality Management Plan proposes that surface and groundwater quality monitoring would be conducted before and after golf course construction to evaluate effects on water quality. A water quality monitoring plan would be developed during the design phase that would specify monitoring locations, frequency, constituents of concern, and target levels. Post-construction water quality monitoring would be conducted for a minimum of five years. The results of the monitoring would be reported to the RWQCB and included in the Stanly Ranch Mitigation Monitoring and Reporting Program (MMRP). The MMRP (described on page 82 of the *Draft SRSP*) would be implemented by the Stanly Ranch Community Owners Association and/or other appropriate entity.

Mitigation Measure HYDRO-2a: The applicant shall prepare and implement a Storm Water Pollution Prevention Plan (SWPPP) designed to reduce potential impacts to surface water quality through the construction and life of the project. The SWPPP would act as the overall program document designed to provide measures to mitigate potential water quality impacts associated with implementation of the *Draft SRSP* (and include the Integrated Pest Management Plan (IPMP), Chemical Application Management Plan (CHAMP), and Water Quality Monitoring Plan). The SWPPP shall include:

- *Specific and detailed BMPs designed to mitigate construction-related pollutants.* These controls shall include practices to minimize the contact of construction materials, equipment, and maintenance supplies (e.g., fuels, lubricants, paints, solvents, adhesives) with storm water. The SWPPP shall specify properly-designed, centralized storage areas that protect these materials from the rain.

An important component of the storm water quality protection effort is knowledge on the part of the site supervisors and workers. To educate on-site personnel and maintain awareness of the importance of storm water quality protection, site supervisors shall conduct regular “informal tailgate” meetings to discuss pollution prevention. The frequency of the meetings and required personnel attendance list shall be specified in the SWPPP.

The SWPPP shall specify a monitoring program to be implemented by the construction site supervisor, and must include both dry and wet weather inspections. Erosion control BMPs contained in the SWPPP shall be incorporated in the project grading and erosion control plan, which is reviewed and approved by the City. City of Napa personnel shall conduct regular inspections to review compliance with the grading and erosion control plan (this is already standard procedure). RWQCB personnel, who may make unannounced site inspections, are empowered to levy considerable fines on the developer if it is determined that the SWPPP has not been properly prepared and implemented.

BMPs designed to reduce erosion of exposed soil may include, but are not limited to: soil stabilization controls; watering for dust control; perimeter silt fences; placement of hay bales; and sediment basins. The potential for erosion is generally increased if grading is performed during the rainy season as disturbed soil can be exposed to rainfall and storm runoff. If grading must be conducted during the rainy season (between October 15 and April 1), the primary BMPs selected shall focus on erosion control, that is, keeping sediment on the slopes. End-of-pipe sediment control measures (e.g., basins and traps) shall be used only as secondary measures. If hydro seeding is selected as the primary soil stabilization method, then slopes shall be seeded by September 1 and irrigated to ensure that adequate root development has occurred prior to October 1. In addition, all grading conducted during the rainy season shall be conducted under a DPW-approved erosion and sediment control plan. Entry and egress from the construction site shall be carefully controlled to minimize off-site tracking of sediment. Vehicle and equipment wash down facilities shall be constructed and designed to be accessible and functional both during dry and wet conditions.

- *Specific and detailed BMPs designed to mitigate post-construction-related pollutants.* The SWPPP shall include all provisions of the conceptual Water Quality Management Plan submitted by the applicant (Appendix F), including specific details about each BMP function, location, and size (including details regarding biofilters, wet ponds, infiltration systems, and porous paving). In addition, the following mitigations shall be incorporated into the SWPPP and its supporting plans:
  - (a) The IPMP and CHAMP (which are part of the SWPPP) shall cover the golf course, orchard, vineyards, and common



landscaping areas. The plans shall be implemented by the Stanly Ranch Community Owners Association or other appropriate entity.

- (b) The inspection and maintenance plan for the treatment control BMPs shall be prepared by a Professional Engineer or Registered Geologist with expertise in erosion and sediment control. The plan shall include criteria for characterization of sediment removed from detention structures, reuse of the sediment on-site, or disposal at an appropriate off-site disposal facility. Chemical characterization of the sediments, shall at a minimum include analyses for heavy metals (cadmium, chromium, nickel lead, and zinc), total petroleum hydrocarbons, diazinon (using enzyme-linked immunosorbent assay (ELISA)), and chlorpyrifor (using ELISA). Chemical characterization shall be conducted for each sediment removal event from detention structures and completed in accordance with the U.S. Environmental Protection Agency's Test Methods for Evaluating Solid Waste (SW-846). Sediment determined to be of adequate quality (i.e., non-hazardous and/or below Preliminary Remediation Goals (PRGs) for residential land use, as established by U.S. EPA), can be used on-site. If, after five years of monitoring, results indicate that the sediments are non-hazardous and below PRGs, monitoring may be discontinued. The plan shall be implemented by the Stanly Ranch Community Owners Association or other appropriate entity.
- (c) The water quality monitoring plan (which is part of the SWPPP and covers the entire project site) shall be prepared by a Professional Engineer or Registered Geologist with expertise in surface and groundwater quality (professional). Baseline surface and groundwater quality monitoring stations shall be established and monitored prior to beginning of construction, through the construction period, and for a minimum of five years after the completion of construction with the approval of the City Department of Public Works. Water quality monitoring within the Napa River would not be a requirement of the plan. Surface water samples shall be collected within one hour after the initiation of runoff at each station during a significant storm (preferably the first storm of the water year to characterize the "first flush"). Subsequent water quality samples shall be collected at each station during storms at least twice per year. Preparers of the monitoring plan shall consult

with the Regional Water Quality Control Board to develop a list of sampling parameters. The analyses considered should include pesticides (including, but not limited to, acephate, diazinon (by ELISA methodology), ethoprop, f. sulfoxide, methamidophos, simazine, and chlorpyrifos (by ELISA methodology)), heavy metals (cadmium, chromium, nickel, lead, and zinc), biological oxygen demand, chemical oxygen demand, total suspended solids, total dissolved solids, total phosphorous, TKN, NO<sub>2</sub>, and NO<sub>3</sub>. The monitoring and mitigation program shall be largely self-directed; that is, the Stanly Ranch Community Owners Association or other appropriate entity shall not wait for direction from the RWQCB or other agency if the data indicate pollutant levels exceeding estimated baseline conditions (or detectable levels of pesticides) are present. If pollutant levels in the runoff exceed estimated baseline conditions, the professional should recommend, and the applicant should implement, prompt and effective measures to prevent subsequent exceedances.

Mitigation Measure HYDRO-2b: The Public Works Department shall review the SWPPP prior to approval of grading plans to ensure that the requirements listed above are included in the plan. Copies shall be provided to the RWQCB for their review.

Mitigation Measure HYDRO-2c: The winery shall obtain a NPDES permit from the Regional Water Quality Control Board prior to establishment of that use.

As a practical matter, even after implementation of all mitigation measures described above, some pollutants not formerly associated with the site, may have impacts on receiving water quality. However, the mitigation measures described above are rigorous by industry standards and the monitoring plan would be designed to detect increases in pollutant loading relative to existing conditions. Remedial actions would be required if pollutant loading was observed to increase above baseline conditions. Further, former agricultural land uses (i.e. grazing in the Lowlands) have adverse water quality impacts of their own (grazing is associated with increased ammonia levels and biological oxygen demand and sedimentation). Therefore, from the perspective of runoff water quality in receiving waters, the project may actually result in a net benefit. However, because water quality impacts to receiving waters cannot be guaranteed to be less than significant, the impact (after mitigation) is defined as potentially significant. (PS)

**Impact HYDRO-3: The existing levees along the Napa River at the project site may fail, and additionally may possibly create a safety hazard to hikers using trails that could be located on the levee. (S)**

The levees at the site are not constructed according to current engineering standards, and therefore cannot be relied upon to offer reliable flood protection for the site Lowlands. It should be noted that possible levee failure would not be a result of the project but could affect the uses of the project site. The current land use of the Lowlands is restricted to livestock grazing. The applicant has "committed to removing grazing from the Lowlands" upon approval of the *Draft SRSP* (Kambe, 1997). Except for limited trails and utilities, no new development that could be affected by the failure of the levees is proposed for the site Lowlands (an employee parking lot and the Environmental Interpretative Center would be constructed on imported fill within the Lowlands, but would be above base flood elevations). Identified uses of the levees include access to valve controls for two Pacific Gas and Electric (PG&E) natural gas mains located on the Southern Lowlands levee.

Failure of the levee could isolate or damage the PG&E valve controls, creating an unacceptable maintenance problem. According to the applicant, Stanly Ranch is under no obligation to maintain the levees to provide access to the pipelines for PG&E (Kambe, 1997).

The proposed hiking trail to and along the river on the levee crest may represent a safety hazard to hikers if not properly designed and maintained. In most areas, the trail has been located on upland areas set back from the river, but there is at least one short segment where the levee is relatively narrow. If the levee is undercut in this area, a trail user could slip and fall into the river and have difficulty getting out. Short-term improvement and long-term maintenance of the portions of the levees which are adjacent to upland areas would be required for recreational use. The levee is unnecessary for flood control protection. While the applicant proposes to maintain the levee in its current condition through the construction period life of the project, once the project is completed, other alternatives may be considered.

To provide a safe trail, possible improvement of limited areas and short-term and long-term maintenance of the portions of the levees would be required for public recreational trail use. The City of Napa has indicated that costs of levee maintenance are unpredictable and are a concern (Stanton, O'Bryon, 1998).

**Mitigation Measure HYDRO-3:** The applicant shall acquire a letter of agreement from PG&E documenting PG&E's commitment to maintain the levee segment providing access to their valve controls for as long as access to their valve controls is needed. The applicant shall submit a copy of the letter



to the City of Napa for review and approval. The City shall not approve the final grading plans prior to receipt of this letter of commitment.

The City shall be willing to accept or work out other arrangements for long-term maintenance responsibility for portions of the levee on which it accepts public trails. (LTS)

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## F. BIOLOGICAL RESOURCES

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This section first describes the methods used to survey the site and develop the analyses of impacts. A discussion of the regulatory requirements and agency jurisdiction follows. The setting section describes existing vegetation and wildlife values of the Stanly Ranch site. Potentially occurring special-status species are also discussed. Potential impacts of the project are then evaluated and mitigation measures are proposed.

<b>1. Setting</b>
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a. Methods. A number of biological studies were completed by the applicant prior to the preparation of the EIR. These were reviewed in addition to the California Natural Diversity Data Base (CNDDB, 1997) which provides a list of special-status plant and wildlife species potentially present in the site vicinity. Field work was conducted by the EIR authors on February 24, 1994; March 28, 1994; and June 5 and 26, 1997 to supplement existing studies of the project site.

Field studies conducted by the EIR authors involved walking random transects over the entire site to identify vegetation and wildlife habitats on the site, assess potential project-related impacts, and assess the accuracy of mapped wetland areas. Plant and wildlife species observed during these field surveys were recorded in field notes.

Wetlands Research Associates conducted rare plant surveys on June 5 and 12, 1991; May 5, June 17, August 2, September 5, October 5, and December 9, 1994 (WRA and Charles Patterson (CP), 1996). Surveys for salt marsh harvest mice (*Reithrodontomys raviventris halicoetes*) were conducted between June 15-23, 1993 (H.T Harvey and Associates, 1993). Raptor surveys were conducted by three biologists on May 12 and 13, 1994 (WRA and CP, 1996). In addition, surveys for western burrowing owls (*Athene cunicularia hypugea*) were conducted according to protocol described by the California Burrowing Owl Consortium (1993) (WRA and CP, 1996). These burrowing owl surveys occurred in conjunction with surveys for special-status species of bats from May 30 through June 5. General amphibian surveys were conducted on May 12 and 13, 1997. Surveys for California red-legged frog were carried out on June 9, 13, 19, and 27, 1997 (WRA, 1997a).

Reports reviewed by the EIR authors and incorporated into this section include the following: *Stanly Ranch Specific Plan* (EDAW, 1997), *Vegetation and Biotic Resources* (Sycamore Associates, Inc., 1991), *Lowlands Area* (WRA, 1991), *Potential Jurisdictional Wetlands: Stanly Ranch* (WRA, 1994) and the associated confirmation letter from the Corps of Engineers confirming the wetland delineation (Fong, 1997); *California Red-legged Frog Field Survey Report* (WRA, 1997a); a letter regarding Contra Costa Goldfields (Josselyn, 1997); *Draft Stanly Ranch: Salt Marsh Harvest Mouse Trapping Surveys* (H.T. Harvey and Associates, Inc., 1993); *Stanly Ranch Special-Status Species Surveys* (WRA and CP, 1996); and a *Riparian Enhancement Plan for Stanly Ranch Napa, California* (WRA, 1997b).

The following reports were also reviewed in order to assess impacts and devise mitigation measures: *The Hydrology of Stanly Ranch* (Philip Williams & Associates (PWA, 1997a); *The Stanly Ranch Specific Plan Technical Appendix: Water Quality Management* (PWA, 1997b); and *Stanly Ranch Specific Plan Technical Appendix: Storm Drainage Management Plan* (PWA and Ruggeri-Jensen-Azar & Associates, 1997); *Stanly Ranch Preliminary Engineering Utility Study Napa, California* (Ruggeri-Jensen-Azar-& Associates, May 1997); *Conceptual Wetland Mitigation Plan for Stanly Ranch* (Wetlands Research Associates, Inc., 1998); and *Review of the Stanly Ranch Eucalyptus Report* (Hagen, 1998). Letters from the U.S. Fish and Wildlife Service (White, 1997) and California Department of Fish and Game (Hunter, 1997) were also reviewed for the impact analyses. Fred Botti, CDFG wildlife biologist was also contacted pertaining to biological resources and impacts.

b. Regulatory Context.

(1) U.S. Fish and Wildlife Service. The U.S. Fish and Wildlife Service (USFWS) has jurisdiction over formally-listed threatened and endangered species under the federal Endangered Species Act (ESA). The ESA protects listed species from harm or "take", which is broadly defined as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct". An activity is defined as a "take" even if it is unintentional or accidental. If an activity will adversely affect a listed species, an incidental take permit through Section 7 or Section 10 of the ESA is required.

An endangered species is one which is considered in danger of becoming extinct throughout all or a significant portion of its range. A threatened species is one that is likely to become endangered within the foreseeable future. In addition to endangered and threatened species, which are legally protected under the federal ESA, there are informal lists of special-status species. These include federal candidate species and federal species of concern. Federal candidate and federal species of concern are generally afforded no legal protection.



(2) California Department of Fish and Game. The California Department of Fish and Game (CDFG) has jurisdiction over state-listed threatened, rare and endangered species under the California Endangered Species Act (CESA). The State also maintains a list of special-status wildlife on its list of Species of Special Concern. Species on this latter list are generally afforded no legal protection. The state and federal lists are generally similar, although a few species present on one list may be absent from the other list. Recent changes to CESA now require a permit from CDFG for the incidental "take" of a State listed species. Such take is authorized, but only if CDFG requires "mitigation measures...roughly proportional in extent to the impact of the authorized taking of the species" (Fish & Game Code Section 2081, subd (b)(2)).

The CDFG also requires a Streambed Alteration Agreement for the fill or removal of any material from any natural drainage. The jurisdiction of the CDFG extends to the top of bank and often includes the outer edge of riparian vegetation canopy cover.

CDFG policy is to oppose projects which result in the reduction of wetland acreage or habitat. The CDFG recommends equal compensation of wetlands in acreage and value (CDFG, 1989). CDFG policy also encourages the use of buffers between proposed development and wetlands to eliminate potential disturbances to fish and wildlife from developmental activities and recommends monitoring to determine any adverse impacts to fish and wildlife resources as a result of a proposed project. CDFG's authority over wetlands is through Streambed Alteration Agreements and incidental "take" permits for those species that occur in wetlands.

The State Fish and Game code identifies "fully protected" wildlife species, which also may not be taken. The salt marsh harvest mouse is a "fully protected" mammal species subject to Fish and Game Code Section 4700 which provides that "[f]ully protected mammals or parts thereof may not be taken or possessed at any time and no provision shall...authorize...permits or licenses to take any fully protected mammal..." Fish and Game Code Section 3511 contains similar provisions for fully protected birds. The American peregrine falcon, Brown pelican, California black rail, California clapper rail, and the golden eagle are fully protected birds.

(3) California Native Plant Society. The California Native Plant Society (CNPS) has developed lists of plant species that they consider to be rare, threatened, or endangered plants in California (Skinner and Pavlik, 1994). Although the CNPS is not a regulatory agency, cities have the discretion but not the obligation, under CEQA, to mitigate species on CNPS' List 1B (plant species considered endangered in California and elsewhere) and List 2 (plant species considered rare, threatened or endangered in California, but common elsewhere). (List 1A plants are considered extinct and no List 1A plants have occurred in the vicinity of Stanly Ranch). List 3

and 4 plant species are plants requiring more information to evaluate their status>  
Lists 1B and 2 are addressed in this EIR.

(4) U.S. Army Corps of Engineers. Under Section 404 of the Clean Water Act, the U.S. Army Corps of Engineers (Corps) is responsible for regulating the discharge of fill material into waters of the United States. Waters of the U.S. and their lateral limits are defined in 33 CFR Part 328.3(a) and include streams that are tributary to navigable waters and their adjacent wetlands. Wetlands that are not adjacent to waters of the U.S. are termed "isolated wetlands" and in many cases, are also subject to Corps jurisdiction.

In general, a Corps permit must be obtained before placing fill in wetlands or other waters of the U.S. The type of permit depends on the acreage involved and the purpose of the proposed fill. Fills of less than three acres are sometimes covered by Nationwide Permits, in which wetland losses may be mitigated by creation of compensatory wetlands (after minimizing loss to the extent possible) and in which public review is not required. Fills of less than one-third of an acre may not require permitting or mitigation (under Corps regulations) under a Nationwide Permit, if the conditions of the Nationwide Permit are satisfied. An Individual Permit is required for projects that result in more than a "minimal" impact on wetlands. Individual Permits require evidence that wetland impacts have been avoided to the extent possible and also require that the permits be available for review of the project by the public and consultation with other federal and state agencies.

Where permits are approved, at least one acre of new equal quality wetland is required for every acre lost, and resource agencies may require higher mitigation ratios.

(5) Regional Water Quality Control Board. Pursuant to Section 401 of the Federal Clean Water Act, projects that qualify for Individual and many Nationwide Permits must obtain a waiver or water quality certification from the Regional Water Quality Control Board (RWQCB). This certification ensures that the project will uphold state water quality standards. The RWQCB may impose mitigation requirements even if the Corps does not. In issuing Section 401 certificates, the RWQCB acts as a responsible agency for CEQA purposes.

(6) City General Plan Policies. The existing and *Draft City General Plans* contain several policies regarding protecting or minimizing impacts on biological resources. In the existing *General Plan* (City of Napa, 1983), these are found in the Conservation Element. In the *Draft General Plan* (City of Napa, 1996), relevant policies follow Goals LU-9, NR-1 and NR-2. Existing policies speak to: protecting fisheries habitats; conserving wetlands and marshes and mitigating development impacts on wetlands and marshes; encouraging restoration of historic marshlands;

preserving stream and riparian habitats in a natural, healthy state; and protecting as much as possible riparian vegetation, oak woodland, evergreen forest, grasslands and chaparral that provide wildlife habitat; and protecting known habitats of rare and endangered plants and animals in accordance with State and Federal laws. In the *Draft General Plan Policy Document*, relevant policies state that the City shall: 1) continue to apply special development standards to proposed development adjacent to riparian corridors and wetlands and critical wildlife habitat; 2) encourage maintenance of wildlife corridors; 3) protect riparian habitat along the Napa River and its tributaries; 4) encourage planting of native plant species in natural habitats; 5) provide protection for significant on-site natural habitat whenever possible; 6) endeavor to identify and protect significant species and groves of trees on project sites; and 7) (new NR-4) give special attention to rare, threatened and endangered species.

c. Existing Conditions.

(1) Vegetation. The Stanly Ranch is mostly grassland with groves of eucalyptus trees (Figure IV.F-1). Portions of the site are diked historic baylands and support hydrophytic<sup>1</sup> grasses and salt marsh. The Stanly Ranch site supports coastal brackish marsh on the outboard side of the levee along the Napa River and along some of the watercourses that drain the site. Riparian woodland is noticeably absent from the site.

Vegetation types present at the project site include Non-native Grassland, California Oatgrass Grassland, Herbaceous Hydrophytic vegetation (which includes Coastal Brackish Marsh), Ornamental Vegetation, Eucalyptus Groves, and a Vineyard. These habitat types are further discussed below.

(a) Non-Native Grassland. Non-Native Grassland dominates the upland areas of the site. Much of the grassland on the site is heavily grazed. The height of this grassland varies between six and 12 inches. The cover of the vegetation in ungrazed or lightly grazed portions of the grassland averages 100 percent. The cover of the vegetation of heavily-grazed portions of the grassland approximates 75 percent.

Plant species present in this habitat are described in reports prepared by Sycamore Associates (1991) and Wetland Research Associates and Charles Patterson (WRA and CP 1996). The dominant grasses include wild oats (*Avena barbata*), soft chess (*Bromus hordeaceus*), ripgut brome (*B. diandrus*), and Harding grass (*Phalaris aquatica*). Forbs present in the upland portions include introduced species, such as mustard (*Brassica* sp.), filaree (*Erodium* sp.), dock (*Rumex pulcher*), narrow-leaved

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<sup>1</sup> Hydrophytic refers to species that are observed at least 50 percent of the time in wetland areas.



plantain (*Plantago lanceolata*), yellow star thistle (*Centaurea solstitialis*), and field bindweed (*Convolvulus arvensis*). Native forbs that occur in the grassland areas include tarweed (*Hemizonia congesta*), Fitch's spikeweed (*Hemizonia fitchii*), slender tarweed (*Madia gracilis*), minature lupine (*Lupinus bicolor*), and California poppy (*Eschscholzia californica*).

*Legal Status:* The non-native grasslands within the site are afforded no legal protection. Although non-native grasslands are not considered sensitive habitats, if burrowing owls (or other sensitive status species) were found there, protection of the burrow area or mitigation for its loss could be required because of the presence of the owls.

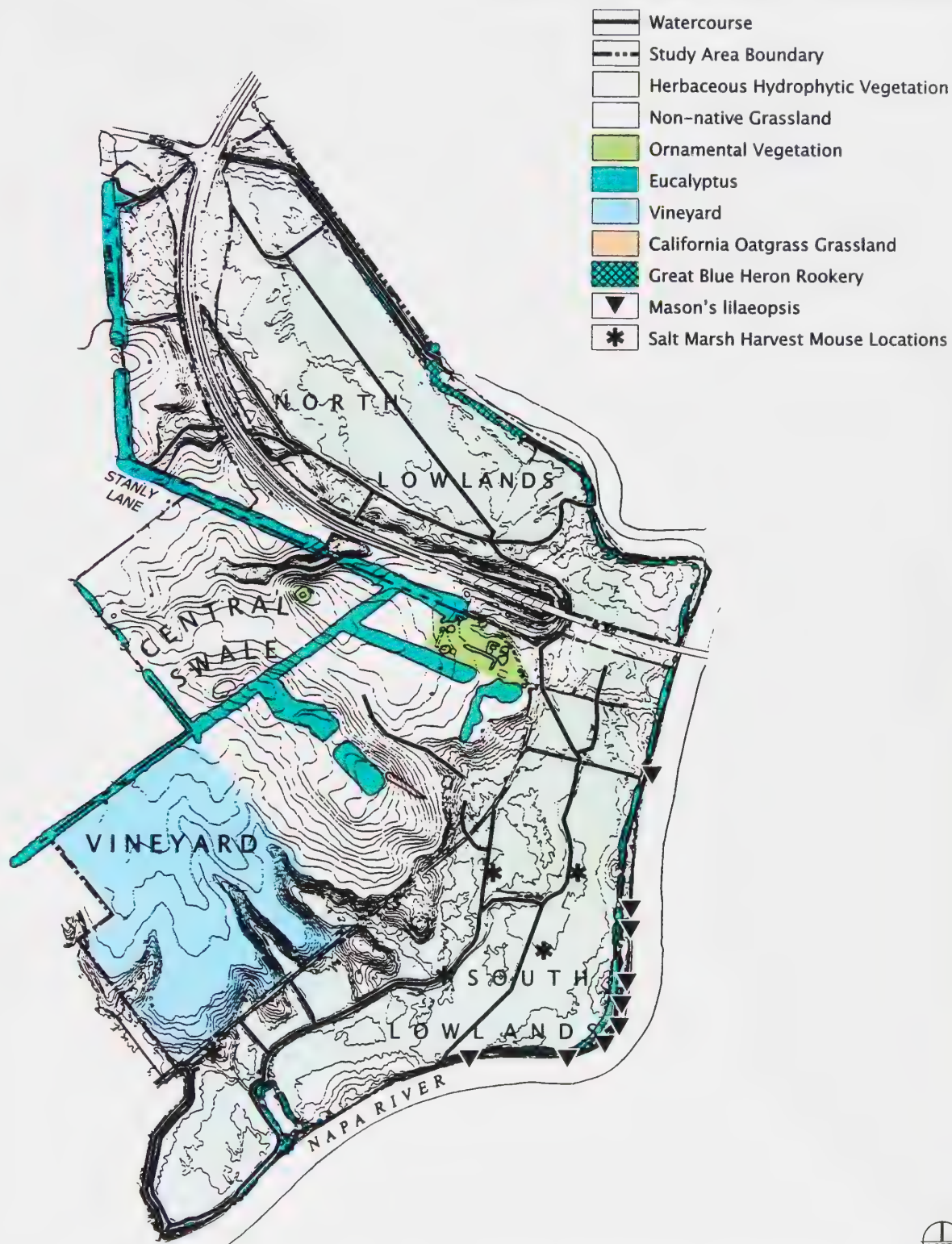
(b) *California Oatgrass Grassland.* California Oatgrass Grassland occurs on the north-facing sloping portion of Home Hill. It occurs in a stand that varies between 10 and 75 percent cover. This stand is approximately 0.55 acres in size. California oatgrass (*Danthonia californica*) is the dominant species. Other species growing with the California oatgrass are various species of non-native grasses.

*Legal Status:* California oatgrass grassland is a sensitive habitat because of its rarity in California. Mitigation may be required for its loss through the CEQA process. It has experienced a decline in abundance due to competition with non-native grass species, grazing, and agricultural, commercial and residential development.

(c) *Herbaceous Hydrophytic.* The Herbaceous Hydrophytic vegetation consists of a variety of types including Hydrophytic Grasslands, Seasonal Salt Marsh, Permanent Fresh Water Marsh and Coastal Brackish Marsh which are discussed below. This vegetation grows in a mosaic type mostly in the Lowland areas of the site that are characterized as jurisdictional wetlands by the Corps. Swales in the uplands are also characterized by this vegetation. Approximately 388.1 acres of wetlands and waters of the United States occur in the Lowlands area and 4.8 acres occur in the grassland areas of Stanly Ranch (WRA 1994) for a total amount of Corps jurisdictional area of 392.9 acres. The Corps verified the jurisdictional wetlands determination for the site in July, 1997. It should be noted that not all of the Lowlands are jurisdictional wetlands: portions of the Lowlands near SR 29/12 and along the levees are "uplands".

Criteria for determining the jurisdictional status of wetlands consists of the presence of hydric soils, wetland hydrology, and hydrophytic vegetation. Soils must have hydric characteristics, such as dark coloration, a large amount of orange mottles or oxidized rhizospheres (root channels), gley (bluish-grey) coloration or other criteria that indicate that the soils experience hydric conditions. The wetland hydrology criteria include drift lines of debris, algal mats and sediment deposits. The

# STANLY RANCH Vegetation and Location of Special-status Species



Source: EDAW, 1997.

## STANLY RANCH SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT

Figure IV.F-1  
Vegetation and Location of Special-Status Species





hydrophytic vegetation criterion is met if a site supports a predominance of plant species that occur at least half of the time in wetlands.

The jurisdictional wetlands in the Lowland areas of Stanly Ranch provide valuable wildlife habitat. During the winter, these wetlands are inundated and provide habitat for waterfowl and shorebirds. These wetlands are also important for maintaining water quality of the Napa River by filtering sediment from the river or from tributaries flowing into the river through these wetlands.

The wetlands of the upland portion of the site are also important for filtering sediment from flows that enter the Napa River. The downstream portion of the Central Swale (see Figure IV.F-1) is dominated by forbs and is a valuable biological resource because of the presence of standing water and native vegetation. The majority of the other wetlands of the upland portion of Stanly Ranch do not pond water and are dominated by non-native vegetation. Consequently, they are not as valued by wildlife as are wetlands that pond water or wetlands that support native vegetation.

*Legal Status:* Jurisdictional wetlands are regulated by the Army Corps of Engineers (COE) under Section 404 of the Clean Water Act. Mitigation is typically required for wetland fill.

*Herbaceous Hydrophytic Grasslands:* The dominant grasses of the Herbaceous Hydrophytic Grasslands include meadow barley (*Hordeum brachyantherum*), Mediterranean barley (*H. marinum* ssp. *gussoneanum*), Italian rye grass (*Lolium perenne*), Harding grass, hair grass (*Deschampsia danthonioides*), and California semaphore grass (*Pleuropogon californicus*). The grass species occur in either single species stands or mixed with other species of grasses or forbs. Forbs present include alkali mallow (*Malvella leprosa*), knotweed (*Polygonum arenastrum*), brass buttons (*Cotula coronopifolia*), lythrum (*Lythrum hyssopifolium*), and birdsfoot trefoil (*Lotus corniculatus*).

*Seasonal Salt Marsh:* Seasonal Salt Marsh occurs in the lower portions of the Lowlands area and in areas of salty soil and salt scalding.<sup>2</sup> Dominant species include pickleweed (*Salicornia virginica*), alkali heath (*Frankenia salina*), salt grass (*Distichlis spicata*), and brass buttons. Other species present include fat hen (*Atriplex triangularis*), rabbit's foot grass (*Polypogon monspeliense*), and bird's foot trefoil. This vegetation occurs in a mosaic of patches with bare ground or in stands of 100 percent cover.

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<sup>2</sup> Salt scalding refers to areas that are virtually bare of vegetation but have a layer of salt on the surface of the soil.

*Permanent Fresh Water Marsh:* Permanent Fresh Water Marsh occurs in the drainage ditches of the project site. The vegetation includes cattail (*Typha* sp.), bulrush (*Scirpus* sp.), spike rush (*Eleocharis* sp.), iris-leaved rush (*Juncus xiphioides*), and round-leaved rush (*Juncus* sp.). This vegetation has been affected by the trampling and feeding of the cattle on the project site.

*Coastal Brackish Marsh:* Coastal Brackish Marsh mostly occurs along the Napa River outboard of the levee, but also in a few places inboard of the levee in the South Lowlands area. This vegetation is subject to tidal inundation. Species present include alkali bulrush (*Scirpus robustus*), California bulrush (*Scirpus californicus*), fat hen, gum plant (*Grindelia stricta* ssp. *angustifolia*), and salt grass. Areas that are not inundated frequently support bird's foot trefoil, Italian rye grass, and rabbit's foot grass.

(d) *Ornamental Vegetation.* Ornamental Vegetation consists of mostly non-native (native species in the case of Monterey pine [*Pinus radiata*]) species that were planted for ornamental purposes. Turf, occasional ornamental shrubs, and ornamental trees surround the existing ranch buildings. Other areas of the project site have an olive grove, Monterey pines, and other types of ornamental trees.

A small stand of introduced olive trees (*Olea europaea*) is present in the west-central portion of the site, at the western end of Home Hill. The stand is a mixed stand of olive and eucalyptus trees. The understory vegetation is dominated by non-native grassland species.

A stand of Monterey pines is present on Cistern Hill in the west-central portion of the site. Scattered individual pines are also present along the Napa River levee.

Other ornamental trees present include Lombardy poplar (*Populus nigra*), present at the pump house in the west-central portion of the site. Several fruit trees (*Malus* sp. and *Prunus* sp.) are present near the pump house, along the intermittent drainage between Stanly Lane and SR 29, and around the existing houses and outbuildings.

Developed land and ornamental plantings have limited value for wildlife. Ornamental plantings of trees and shrubs may provide cover, nesting areas, etc. for wildlife. Wildlife may be attracted to water and food sources in developed areas and may consequently encounter human-related hazards, such as contact with domestic animals, road mortality, pesticide and fertilizer exposure.

*Legal Status:* Ornamental plantings are provided no legal protection.

(e) *Eucalyptus Groves.* Eucalyptus trees (*Eucalyptus* sp.) are present as windrows and groves in the central portions of the site, along Stanly Lane and Old

Suscol Road, and on the west Napa River levee. The trees in the interior of the site are mature and trunks are typically between 2 to 4 feet in diameter and trees are over 60 feet tall. Eucalyptus trees at Stanly Ranch, however, have been infested with the eucalyptus longhorn borer insect during the past three years which has caused serious damage and death to many trees. The stands along Stanly Lane and Old Suscol Road form narrow, dense stands. The other interior stands are wider than the windrows along the roads. Trees in the stands along the Napa River are shorter (50-60 feet tall) and trunks are approximately 1 to 2 feet in diameter. These trees appear to be stunted and exhibit die-back on the branches. Understory vegetation is dominated by non-native grasses and forbs such as miner's lettuce (*Claytonia perfoliata*).

*Legal Status:* The eucalyptus groves within the study area are non-native and are afforded no legal protection. Nevertheless, if a eucalyptus tree in the project area was found to support a special status species, temporary protection of the tree or grove of trees could be required by state or federal agencies.

- (f) *Vineyard.* A vineyard is present in the southwestern portion of the project site (see Figure IV.F-1). Understory vegetation is dominated by mustard (*Brassica* sp.), Italian rye grass, and other non-native annual grasses. Field bindweed also occurs in the vineyard.

*Legal Status:* Vineyards are afforded no legal protection.

(2) *Wildlife.* Wildlife observed includes one amphibian, 56 bird, and six mammal species. The scientific names of birds follow the standardized nomenclature in the *Checklist Of North American birds*, sixth edition (AOU, 1983), plus supplements. The discussion of wildlife is presented for each of the major habitat types on the Stanly Ranch site. These habitat types are grasslands, Napa River and intermittent drainages, Herbaceous Hydrophytic, Eucalyptus and Ornamental Trees, and Vineyard.

(a) *Grassland.* Wildlife observed in the grassland areas were seven bird and five mammal species. Birds observed were killdeer, horned lark, loggerhead shrike, European starling, savannah sparrow, western meadowlark, and Brewer's blackbird. Mammals observed, or evidence of their presence (in the form of tracks or scat), were black-tailed jackrabbit (*Lepus californicus*), Botta's pocket gopher (*Thomomys bottae*) (mounds), deer mouse (*Peromyscus maniculatus*), California vole (*Microtus californicus*) and coyote (*Canis latrans*).

(b) *Napa River and Intermittent Drainages.* Wildlife observed in the intermittent drainages were one amphibian, 11 bird, and two mammal species. The amphibian observed was the Pacific tree frog (*Pseudacris regillii*). Birds observed



were Cooper's hawk, California quail, black phoebe, scrub jay, northern mockingbird, California towhee, fox sparrow, song sparrow, golden-crowned sparrow, white-crowned sparrow, and house finch. Mammals observed were black-tailed jackrabbit and raccoon (*Procyon lotor*). Wildlife observed on the Napa River were American coot and common goldeneye.

(c) *Herbaceous Hydrophytic*. Pacific tree frogs were observed in seasonal swales on the Stanly Ranch site. No other mammals, reptiles, or amphibians were observed on the site. Seventeen species of birds were observed in the Herbaceous Hydrophytic vegetation in the Lowlands areas of the site. These species were: double-crested cormorant, great blue heron, great egret, snowy egret, Canada goose (large form), mallard, northern pintail, gadwall, American wigeon, bufflehead, ruddy duck, northern harrier, merlin, killdeer, ring-billed gull, glaucous-winged gull, and belted kingfisher. A small population of salt marsh harvest mice occurs in this vegetation in the South Lowlands (Figure IV.F-1).

(d) *Eucalyptus and Ornamental Vegetation*. Few species were observed in the eucalyptus groves. Most of the wildlife species were observed utilizing ornamental trees on the site. Wildlife species observed primarily in the ornamental trees present on-site were 21 bird species. Bird species were white-tailed kite, red-shouldered hawk, red-tailed hawk, American kestrel, merlin, rock dove, mourning dove, long-eared owl, Anna's hummingbird, Nuttall's woodpecker, northern flicker, tree swallow, scrub jay, American crow, common raven, western bluebird, American robin, European starling, yellow-rumped warbler, dark-eyed (Oregon) junco, and house finch. No amphibians, reptiles, or mammals were observed during site visits by the EIR authors.

(e) *Vineyard*. Wildlife species observed in the vineyard were five bird species that included mourning dove, American robin, loggerhead shrike, red-winged blackbird, and Brewer's blackbird.

(f) *Other Wildlife*. Two raptor species observed foraging over the project site were a turkey vulture and golden eagle. Additional wildlife species observed by Sycamore Associates (SA) (1991), WRA (1991), and WRA and CP (1996) included three reptile, 19 bird, and three mammal species. Reptiles observed by SA and WRA were western fence lizard (*Sceloporus occidentalis*), western skink (*Eumeces skiltonianus*), and southern alligator lizard (*Elgaria = Gerrhonotus multicarinatus*). Birds observed were osprey, California gull, great horned owl, downy woodpecker, olive-sided flycatcher, western wood pewee, Pacific slope flycatcher, Say's phoebe, western kingbird, violet-green swallow, northern rough-winged swallow, cliff swallow, barn swallow, chestnut-backed chickadee, bushtit, brown-headed cowbird, northern oriole, lesser goldfinch, and house sparrow. Mammals observed were

California ground squirrel (*Spermophilus beecheyi*), Norway rat (*Rattus norvegicus*), and striped skunk (*Mephitis mephitis*).

(3) Sensitive Habitats. As discussed in the vegetation section, sensitive habitats present on the project site are the wetlands, including drainages, and wetland vegetation and the California oatgrass grassland.

(4) Special-Status Species. For purposes of this EIR, special-status species include:

- species that are listed, or proposed for listing, as threatened or endangered under the federal Endangered Species Act (ESA);
- species that are listed or proposed for listing by the State of California as rare, threatened or endangered under the California Endangered Species Act (CESA); and
- species that meet the definition of rare or endangered under the California Environmental Quality Act.

Under Section 15380 of the California Environmental Quality Act (CEQA), a species not included in formal listing identified by the state “shall nevertheless be considered rare or endangered if the species can be shown to meet the criteria” for listing. This section permits lead agencies to treat unlisted species as though they are rare, threatened or endangered, and mitigation may be required.

(a) Legal Status. Formally listed threatened, rare or endangered species receive certain legal protection as briefly described below.

Under CEQA Guidelines Section 15065, the lead agency shall find that a project may have a significant effect where the project has the potential to reduce the number or restrict the range of a federal or state listed endangered, rare or threatened species. Under this section, when an EIR shows that a project will reduce the range of a listed species, the lead agency has a mandatory legal obligation to treat that impact as being significant and to mitigate that impact if doing so is feasible. If a project has the potential to impact a listed plant, that plant is protected by CEQA and feasible mitigation shall be required.

Under ESA, the USFWS can permit the “incidental take” of one or more individuals from a listed fish or wildlife species if such take is accompanied by a habitat conservation plan that “to the maximum extent practicable, [will] minimize and mitigate” impacts associated with the take, provided that “the taking will not appreciably reduce the likelihood of survival and recovery of the species in the wild” (16 U.S.C. Sec 1539(a)(2)(B)).

Under CESA, “the impacts of the authorized take (of listed species) shall be minimized and fully mitigated. The measures required to meet this obligation shall be roughly proportional in extent to the impact of the authorized taking of the species” (Fish & G. Code Sec 2081, subd (b)(2)).

Destruction of listed plants can occur only after a notice requirement by the California Native Plant Protection Act. (Fish & G. Code Sec. 1913 subd (c)).

In addition to Federal and State listed threatened, rare or endangered species, the State Fish and Game code identifies “fully protected” wildlife species, which also may not be taken. The salt marsh harvest mouse is a “fully protected” mammal species subject to Fish and Game Code Section 4700 which provides that “[f]ully protected mammals or parts thereof may not be taken or possessed at any time and no provision shall...authorize...permits or licenses to take any fully protected mammal...” Fish and Game Code Section 3511 contains similar provisions for fully protected birds. The American peregrine falcon, Brown pelican, California black rail, California clapper rail, and the golden eagle are fully protected birds.

(b) *Special-Status Plants.* Fourteen species of special-status plants potentially occur in the region of the Stanly Ranch site (Table IV.F-1). The list of potentially occurring special-status species was developed from a query of the CNNDDB (1997), review of WRA and CP (1996), White (1996), and the EIR author’s knowledge of the distribution and habitat use of special-status species.

*Observed:* Mason's lilaeopsis (*Lilaeopsis masonii*), a California listed “rare” species, was observed on the Stanly Ranch site. Mason's lilaeopsis occurs in tidally-influenced mudflat areas at the edge of channels and is found in several locations outboard of the levee along the Napa River (Figure IV.F-1). Approximately seven colonies, consisting of a total of 300 to 600 plants, were observed in the center portion of the shoreline along the Napa River (WRA and CP 1996). Zebell (1993), however, found 29 patches growing along the shoreline of the Napa River. Mason's lilaeopsis grows on exposed muddy banks and terraces, usually near the high water line. Colonies were often found on unstable river banks which were in the process of being undermined by erosion. As a result, the distribution of Mason's lilaeopsis should not be expected to remain static (WRA and CP, 1996; Zebell, 1993).

*Potentially Occurring:* None of the plant species described below have been observed on the site (see WRA and CP [1996] for additional information). Three potentially occurring species are found in grassland areas: Gairdner's yampah (*Perideritia gairdneri* ssp. *gairdneri*), showy Indian clover (*Trifolium amoenum*), and Santa Cruz tarplant (*Holocarpha macradenia*). Two others occur in relatively fresh water seasonally ponded areas (vernal pools): Contra Costa goldfields (*Lasthenia conjugens*) and legenere (*Legenere limosa*). Two species occur in



**Table IV.F-1  
SPECIAL-STATUS PLANT SPECIES  
POTENTIALLY OCCURRING AT STANLY RANCH**

Common Name	Scientific Name	Status <sup>a</sup>
Alkali milkvetch	<i>Astragalus tener</i> var. <i>tener</i>	SC/- /1B
California sea blite	<i>Suaeda californica</i>	PFE/- /1B
Contra Costa goldfields	<i>Lasthenia conjugens</i>	FE/- /1B
Delta tule pea	<i>Lathyrus jepsonii</i> ssp. <i>jepsonii</i>	SC/- /1B
Gairdner's yampah	<i>Perideria gairdneri</i> ssp. <i>gairdneri</i>	SC/- /1B
Legerere	<i>Legenere limosa</i>	SC/- /1B
Marin knotweed	<i>Polygonum marinense</i>	SC/- /3
Mason's lilaeopsis <sup>b</sup>	<i>Lilaeopsis masonii</i>	SC/SR/1B
Santa Cruz tarplant	<i>Holocarpha macradenia</i>	FC/SE/1B
Showy Indian clover	<i>Trifolium amoenum</i>	FE/- /1B
Soft bird's beak	<i>Cordylanthus mollis</i> ssp. <i>mollis</i>	FE/CR/1B
Suisun thistle	<i>Cirsium hydrophyllum</i>	FE/- /1B
Suisun marsh aster	<i>Aster lentus</i>	SC/- /1B
Valley spearscale	<i>Atriplex joaquiniana</i>	SC/- /1B

- <sup>a</sup> First entry is Federal status, second entry is State status, third entry is CNPS status, dash (-) indicates no status.
- FE - Listed as endangered by the Federal Government  
 FT - Listed as threatened by the Federal Government  
 PFE - Proposed for listing as endangered by the Federal Government  
 PFT - Proposed for listing as threatened by the Federal Government  
 FC - Federal candidate for listing as either threatened or endangered  
 SC - Federal Species of Concern  
 SE - Listed as endangered by the State Government  
 SR - Listed as rare by the State Government  
 ST - Listed as threatened by the State Government  
 1B - California Native Plant Society's designation of rare and endangered throughout its range.  
 3 - California Native Plant Society's designation of plants for which more information is needed regarding threats and distribution.
- <sup>b</sup> Observed on the project site by applicant's consultants.

☐ Listed species.

seasonal alkali wetlands: alkali milkvetch (*Astragalus tener* var. *tener*) and valley spearscale (*Atriplex joaquiniana*). The other species occur in either salt marshes or brackish marshes. These species are California sea blite (*Suaeda californica*), Delta tule pea (*Lathyrus jepsonii* ssp. *jepsonii*), Marin knotweed (*Polygonum marinense*), soft bird's beak (*Cordylanthus mollis* ssp. *mollis*), Suisun thistle (*Cirsium hydrophyllum*), and Suisun aster (*Aster lentus*).

(c) *Special-Status Wildlife*. Forty-four species of special-status wildlife potentially occur in the region of the Stanly Ranch project site. Table IV.F-2 lists the scientific names of the special-status animals. Of these, the following are listed

**Table IV.F-2**  
**SPECIAL-STATUS FISH AND WILDLIFE SPECIES**  
**POTENTIALLY OCCURRING AT STANLY RANCH**

Common Name	Scientific Name	Status <sup>a</sup>	Occurrence <sup>b</sup>
<b>Mammals</b>			
Salt marsh harvest mouse	<i>Reithrodontomys raviventris halicoetes</i>	FE/SE	Present
Pallid bat	<i>Antrozous pallidus</i>	SC/CSC	Unlikely
Greater western mastiff-bat	<i>Eumops perotis californicus</i>	SC/CSC	Unlikely
Fringed myotis bat	<i>Myotis thysanodes</i>	SC/-	Unlikely
Long-eared myotis bat	<i>Myotis evotis</i>	SC/-	Unlikely
Long-legged myotis bat	<i>Myotis volans</i>	SC/	Unlikely
Pacific western big-eared bat	<i>Plecotus townsendii townsendii</i>	SC/CSC	Unlikely
Suisun ornate shrew	<i>Sorex ornatus sinuosus</i>	SC/CSC	Unlikely
<b>Birds</b>			
American peregrine falcon	<i>Falco peregrinus anatum</i>	FE/SE	Incidental
Merlin	<i>Falco columbarius</i>	-/CSC	Present
California brown pelican	<i>Pelecanus occidentalis californicus</i>	FE/SE	Incidental
California clapper rail	<i>Rallus longirostris obsoletus</i>	FE/SE	No Habitat
California black rail	<i>Laterallus jamaicensis</i>	SC/ST	No Habitat
Western snowy plover	<i>Charadrius alexandrinus nivosus</i>	FT/CSC	No Habitat
Long-billed curlew	<i>Numenius americanus</i>	-/CSC	Outside Known Range
Bald eagle	<i>Haliaeetus leucocephalus</i>	FT/SE	Incidental
Golden eagle	<i>Aquila chrysaetos</i>	-/CSC	Present
Osprey	<i>Pandion haliaetus</i>	-/CSC	Present
Sharp-shinned hawk	<i>Accipter striatus</i>	-/CSC	No Habitat
Cooper's hawk	<i>Accipter cooperi</i>	-/CSC	Present
Northern harrier	<i>Circus cyneus</i>	-/CSC	Present
Western burrowing owl	<i>Athene cunicularia hypugea</i>	SC/CSC	Unlikely
Long-eared owl	<i>Asio otis</i>	-/CSC	Present
Short-eared owl	<i>Asio flammeus</i>	-/CSC	Unlikely
Ferruginous hawk	<i>Buteo regalis</i>	SC/CSC	Outside Known Range
White-tailed kite	<i>Elanus leucurus</i>	-/CSC	Present
Tricolored blackbird	<i>Agelaius tricolor</i>	SC/CSC	Present
Bell's sage sparrow	<i>Amphispiza belli belli</i>	SC/CSC	No Habitat
San Pablo song sparrow	<i>Melospiza melodia samuelis</i>	SC/CSC	Present
Little willow flycatcher	<i>Empidonax trailii brewsteri</i>	SC/CE	No Habitat
Saltmarsh common yellowthroat	<i>Geothlypis trichas sinuosa</i>	SC/CSC	Present
California horned lark	<i>Eremophila alpestris</i>	-/CSC	Present
Loggerhead shrike	<i>Lanius ludovicianus</i>	-/CSC	Present
Great blue heron	<i>Ardea herodias</i> (breeding areas)	-/- <sup>c</sup>	Present
<b>Reptile</b>			
Northwestern pond turtle	<i>Clemmys marmorata marmorata</i>	SC/CSC	Unlikely
California horned lizard	<i>Phrynosoma coronatum frontale</i>	SC/CSC	Unlikely
<b>Amphibians</b>			
California red-legged frog	<i>Rana aurora draytonii</i>	FT/CSC	Unlikely
Foothill yellow-legged frog	<i>Rana boylei</i>	SC/CSC	Unlikely
Western spadefoot	<i>Scaphiopus hammondi</i>	SC/CSC	Outside Known Range
California tiger salamander	<i>Ambystoma californiense</i>	FC/CSC	Outside Known Range
<b>Fish</b>			
Tidewater goby	<i>Eucyclogobius newberryi</i>	FE/CSC	Outside Current Range
Winter-run chinook salmon	<i>Oncorhynchus tshawytscha</i>	FE/SE	Incidental
Coho salmon	<i>Oncorhynchus kisutch</i>	FT/SE	Incidental

Table IV.F-2 *continued*

Common Name	Scientific Name	Status <sup>a</sup>	Occurrence <sup>b</sup>
Central California steelhead	<i>Onchyrhynchus mykiss</i>	FT/CSC	Incidental
Delta smelt	<i>Hypomesus transpacificus</i>	FT/ST	Possible
Longfin smelt	<i>Sopirinchus thaleichthys</i>	SC/CSC	Possible
Green sturgeon	<i>Acipenser medirostris</i>	SC/-	Incidental
River lamprey	<i>Lampetra ayresi</i>	SC/CSC	Incidental
Pacific lamprey	<i>Lampetra tridentata</i>	SC/-	Incidental
Sacramento splittail	<i>Pogonichthys macrolepidotus</i>	PFT/CSC	Possible
<b>Invertebrates</b>			
Mimic tryonia	<i>Tryonia imitator</i>	SC/-	Possible
California freshwater shrimp	<i>Syncaris pacifica</i>	FE/SE	No Habitat
Callippe silverspot butterfly	<i>Speyeria callippe callippe</i>	FE/-	Outside Known Range
Ricksecker's water scavenger beetle	<i>Hydrochara rickseckeri</i>	SC/-	Possible

<sup>a</sup> First entry is Federal status, second entry is State status:

FE - Listed as endangered by the Federal Government

FT - Listed as threatened by the Federal Government

PFE - Proposed for listing as endangered by the Federal Government

PFT - Proposed for listing as threatened by the Federal Government

FC - Federal candidate for listing as either threatened or endangered

SC - Federal Species of Concern

SE - Listed as endangered by the State Government

SR - Listed as rare by the State Government

ST - Listed as threatened by the State Government

CSC - California Department of Fish and Game Species of Special Concern

<sup>b</sup> Present - Observed on the site by the applicant's consultants or the EIR authors.

Unlikely - Not observed on-site.

Incidental - Use of site would be on a very infrequent basis if at all.

No Habitat - Habitat is absent from the site.

Outside Range - The distribution of the species is outside of the location of the project site.

Possible = A particular species may occur on or adjacent to the site.

<sup>c</sup> Heron rookeries are a State special-status resource.



Listed species.



species: California brown pelican, Western snowy plover, California clapper rail; California black rail; peregrine falcon; and bald eagle. Fully protected species under the Fish and Game Code include the golden eagle, California brown pelican, clapper rail and peregrine falcon.

*Observed:* Fourteen of the above wildlife species were observed on the project site by WRA, HA, and the EIR authors. Special-status wildlife species observed on the site were the salt marsh harvest mouse, nesting great blue herons, California horned lark, loggerhead shrike, common yellowthroat, tricolored blackbirds, San Pablo song sparrows, white-tailed kite, northern harrier, long-eared owl, golden eagle, Cooper's hawk, merlin, and osprey. Of these, the salt marsh harvest mouse is a fully protected and listed species. The golden eagle is a fully protected species.

All observations of the salt marsh harvest mouse were in the South Lowlands in areas dominated by pickleweed. About 7 acres of high quality habitat and 17 acres of medium quality habitat for the salt marsh harvest mouse exist on the site (HA, 1993).

A great blue heron rookery occurs in the eucalyptus trees growing on the levee along the Napa River beside the North Lowlands. This rookery consists of several nests in the eucalyptus trees. The nests are about 40 to 50 feet from the ground. Breeding areas for herons are special status resources.

California horned larks were observed on the abandoned railroad bed in the southern portion of the site, and loggerhead shrikes were observed in the vineyard and South Lowlands area.

A common yellowthroat, identified by WRA (1991) as a salt marsh common yellowthroat, was observed in brackish vegetation adjacent to the southern property boundary of the project site. Breeding season surveys for this subspecies in 1985 resulted in the observation of one nesting pair, located along the west bank of the Napa River, adjacent to the southern boundary of the project site (Hobson et. al., 1986).

A small flock, approximately 20 individuals, of tricolored blackbirds was observed foraging the wetland at the western margin of the vineyards. San Pablo song sparrows were observed in pickleweed during the spring.

White-tailed kite, northern harrier, long-eared owl, golden eagle, Cooper's hawk, merlin, and osprey were observed either foraging or roosting on or adjacent to the project site. Although nests were not detected, Cooper's hawk and long-eared owls could nest in the eucalyptus trees. No nests of other raptors were observed in the

eucalyptus trees. Cooper's hawk would also be expected to forage in the eucalyptus trees.

*Potentially Occurring:* The special-status wildlife species that could potentially occur on the project site but were not observed include four species of invertebrates, four species of amphibians, two species of reptiles, thirteen species of birds, and seven species of mammals (see Table IV.F-2).

The potentially occurring special-status invertebrate species include the mimic tryonia snail and Ricksecker's water scavenger beetle. The mimic tryonia potentially occurs in the tidal areas along the Napa River. Ricksecker's water scavenger beetle could potentially occur in the seasonal pond that occurs beside Stanly Lane.

*Unlikely to Occur:* The occurrence of a number of special-status species is remotely possible and these are included in Table IV.F-2 in order to adequately address all potentially occurring species. These species include two species of invertebrates, four species of amphibians, two species of reptiles, 12 species of birds, and seven species of mammals. These species are not likely to occur on the site because of the absence of habitat, the project site is outside of their known historic or current range, or they were not observed on-site during surveys. The incidentally-occurring species are also included here because they could appear on the site but only on a very infrequent basis. So rarely would these species appear on the site that they would not be considered to occur or reside on the site.

Special-status invertebrate species whose presence on the project site is unlikely include the Callippe silverspot butterfly and the California freshwater shrimp. The Callippe silverspot butterfly probably does not occur on the site because its larval foodplant (*Viola pedunculata*) is either absent or grows too sparsely to support a population of silverspot butterflies. The California freshwater shrimp occurs in flowing freshwater. It lives beneath overhanging willows, but does not occur on-site because its habitat is absent.

The unlikely to occur special-status amphibian and reptile species are the California red-legged frog, the foothill yellow-legged frog, the western spadefoot, the northwestern pond turtle, the California tiger salamander and the California horned lizard. The southern and northern intermittent drainages in the northwestern portion of the site could potentially support both species of frog and the turtle. The California tiger salamander and western spadefoot would be more likely to occur in the seasonal pond. The California horned lizard has not been observed in Napa County and its habitat is not present on the Stanly Ranch.

No specimens of California red-legged frog, foothill yellow-legged frog, or northwestern pond turtle were encountered during surveys of the Stanly Ranch site.

These three species are therefore not likely to occur at Stanly Ranch. California horned lizard, western spadefoot, and California tiger salamander are not known to exist in the vicinity of the project site (CNDDDB, 1997) and are therefore not likely to occur at Stanly Ranch. The unlikely to occur special-status bird species are the following:

- California brown pelican
- Western snowy plover
- California clapper rail
- California black rail
- little willow flycatcher
- Bell's sage sparrow
- peregrine falcon
- sharp-shinned hawk
- short-eared owl
- western burrowing owl
- long-billed curlew
- bald eagle
- ferruginous hawk

California brown pelican potentially pass through the site on an incidental basis, but their occurrence is unlikely. They have not been observed on-site. Western snowy plover has not been observed on the project site based on available information. It is not likely to occur on-site because its breeding habitat, large expanses of bare areas, is absent.

The clapper rail is known to occur in Bull Island and Fagan Slough (CNDDDB, 1997), just 500 and 2,500 feet respectively, southeast of the project site. Salt marsh habitat consisting of cord grass (*Spartina foliosa*) and pickleweed, with a diversity of channels for hiding, is absent from the Stanly Ranch site. Habitat for California clapper rail is therefore not present on the project site, or along the west bank of the Napa River in the project vicinity.

The California black rail is known from Fagan Slough and Bull Island (CNDDDB, 1997). Habitat for the black rail is not present on the site or along the west bank of the Napa River in the project vicinity. California black rails are therefore not likely to occur on the project site.

Little willow flycatchers are not likely to occur on the Stanly Ranch because of the absence of well-developed willow riparian woodland. Transient individuals may temporarily occur on-site but breeding is very unlikely. It is also unlikely that Bell's sage sparrow would occur on-site because of the absence of its shrubby habitat.



Nesting habitat for the peregrine falcon consists of cliff faces and other inaccessible rocky areas and is not present on the site. Nevertheless, the wetlands on the site provide potential foraging habitat for the peregrine falcon. Its presence on-site would be incidental.

The sharp-shinned hawk, short-eared owl, and burrowing owl were not observed on the project site although foraging habitat is present for all three species. The coastal brackish marsh and grasslands in the Lowlands, diked historic bayland wetlands, potentially provide nesting habitat for the short-eared owl. Burrowing owls were not observed during surveys despite the presence of nesting habitat in a few locations. The oak woodland nesting habitat for the sharp-shinned hawk is absent. Because these species were not observed during surveys, their occurrence on-site is unlikely.

Long-billed curlew potentially forage in the North and South Lowland portions of the project site. Breeding, however, occurs in northeastern California. Like herons, breeding areas are the special-status resource for long-billed curlews.

Bald eagle and ferruginous hawk have not been observed on the Stanly Ranch site. Bald eagle may incidentally forage in the Napa River adjacent to the project site during the winter. Bald eagles do not breed in the vicinity of the site. The occurrence of ferruginous hawks on the site would be incidental because they mostly occur along the foothills of the Central Valley in the winter time. They occur in the very northeastern portion of California during the breeding season.

The following special-status mammal species are unlikely to occur at Stanly Ranch.

- pallid bat
- Pacific western big-eared bat
- long-legged myotis bat
- long-eared myotis bat
- fringed myotis bat
- greater western mastiff-bat
- Suisun ornate shrew

The bat species roost in buildings, rock crevices, caves, mines, and hollow trees during the day. The outbuildings on-site could provide roosting habitat for these and other bat species. The grassland and wetlands could provide foraging habitat for these bats. Because no bats were observed on the Stanly Ranch roosting in any structures, they are unlikely to occur on-site. The Suisun ornate shrew is not likely to occur on the site because it is not previously known from the project vicinity and it was not encountered during surveys for salt marsh harvest mice.

(d) *Special-Status Fish.* Eleven species of special-status fish potentially occur in the Napa River adjacent to the project site. These species are: tidewater goby; winter-run chinook salmon; coho salmon; Central California steelhead; delta smelt; longfin smelt; green sturgeon; river lamprey; Pacific lamprey; and Sacramento splittail. Scientific names are provided in Table IV.F-2. Of these, the tidewater goby, winter-run chinook salmon, coho salmon, Central California steelhead, and delta smelt are all listed species; none are fully protected species under Fish and Game Code Section 5515.

## **2. Impacts and Mitigation Measures**

a. Criteria of Significance. Significant biological effects are defined as those in which the proposed project would:

- Reduce the number or restrict the range of an endangered, rare or threatened (i.e., listed) species;
- Substantially reduce the habitat of a special-status fish and wildlife species;
- Cause a special-status fish or wildlife population to drop below self-sustaining levels;
- Threaten to eliminate a special-status plant or animal community;
- Result in take of any fully protected mammal or bird species;
- Substantially diminish native habitat for wildlife or plants; or
- Diminish the area or quality of a jurisdictional wetland.

b. Impact Overview. The proposed project avoids placing development in sensitive wetland habitat and wetland fill is limited. Most development is proposed on the site's non-native grasslands. Still, the project would result in significant impacts to wetlands. Roads and golf course fairways cross site drainageways and would result in some wetland fill. However, the *Draft SRSP* includes bridges across drainages and golf course fairways, designed to avoid wetlands to the greatest extent possible (WRA, 1998). The Project River Trail, (as well as two alternative river trail alignments described in Appendix D), also has wetland impacts. Indirect impacts on wetlands would occur from increased human activity near wetlands and changes in site drainage.

In addition, the project includes loss of most of the site's large eucalyptus trees which creates potential impacts to raptors nesting within trees of the site. Various species of special-status bats may also be affected by the proposed project if they were to roost on the project site. These impacts are discussed in more detail below.

- c. Less-Than-Significant Impacts. Based on the criteria of significance listed below, no impacts would be less-than-significant prior to mitigation.
- d. Significant Impacts. The following impacts have been determined to be significant.

**Impact BIO-1: The proposed project would result in fill of approximately 1.75 acres of wetlands. (S)**

Wetlands would be affected by a variety of components of the proposed project (see Table IV.F-3). The golf course would adversely affect wetlands from fill (direct impact) and from golf course play across wetlands (indirect impact).

The Project River Trail (Northerly Loop and Future Southerly Loop) would cause indirect disturbance from pedestrians. One wetland crossing and a drainage crossing on the Northerly Loop would both be bridged. Use of pilings would also avoid impacts.

Widening Stanly Lane would involve crossing five watercourses. However, four would involve arched culverts and no fill. The Central Swale crossing would involve fill of 900 square feet of wetlands.

Development proposed in the vicinity of the employee housing area could result in the fill of 6,000 square feet of wetlands; however, this wetland area could be avoided.

Locating a sedimentation basin in a portion of the Central Swale would result in impacts to approximately 40,774 square feet of wetlands.<sup>3</sup>

The Emergency Vehicle Access and other crossings of the Central Swale would result in limited fill of wetlands. Grading near the resort lodge would fill 20,473 square feet of wetlands.

Boring the sanitary sewer line and reclaimed water line beneath the Napa River could result in the fill of wetlands. The location of the drilling has not yet been placed on a map and it is possible that the adjacent wetlands could be affected by the operation of this machinery. Bore and jack methods could be used to avoid wetland impacts.

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<sup>3</sup> The authority of the Clean Water Act to regulate excavation will depend upon the results of the appeals of the decision on the National Mining Association vs. The U.S. Army Corps of Engineers (COE) No. 97-5099 (D.C. Cir. June 19, 1998). This EIR assumes that the COE will continue to have the authority to regulate excavation of wetlands.



**Table IV.F-3**  
**AREA OF WETLAND IMPACTS<sup>a,d</sup>**

<b>Location of Impact</b>	<b>Fill Without Mitigation (sf)</b>	<b>Fill With Mitigation<sup>b</sup></b>	<b>Indirect Impact (sf)</b>
<i><b>Golf Course</b></i>			
Golf Hole 1	3,000	3,000	--
Golf Hole 3 play across waters of the U.S.			1,360 waters
Golf Hole 4 play across waters of the U.S. and wetlands			2,080 waters 15,682 wetlands
Golf Hole 5 play across wetlands			11,326
Golf Hole 10/Neighborhood 1	800	800	
Golf Hole 12 play across wetlands			24,393
Golf Hole 13 play across wetlands			9,583
Golf Hole 14 play across wetlands			32,670
<i><b>Resort Area</b></i>			
Inundation of Central Swale by Resort	40,774	40,774	
Emergency Vehicle Crossing Central Swale	2,400	2,400	
Street crossing of upper Central Swale	961	961	
Resort Lodge Area grading	20,473	20,473	
<i><b>Widen Stanly Lane</b></i>			
Central Swale crossing	900	900	
Four other Stanly Lane crossings will be bridged with arched culverts to avoid wetlands	3,600	--	
<i><b>Napa River Trail</b></i>			
Northerly loop- two crossings bridged	1,800	--	
Southerly loop	2,500	--	
Employee housing area	6,000	--	
Boring for sanitary sewer line and reclaimed water line	0-unknown	--	
Road to sewage treatment ponds (On-Site Wastewater Alt. only, see Chapter V)		0- 4,800	
<b>TOTALS<sup>c</sup></b> Waters of the U.S.		800	3,440
Wetlands		75,808 (1.74 acres)	93,654 (2.15 acres)

- <sup>a</sup> Wetlands are areas that support hydrophytic vegetation, hydric soils, and wetland hydrology. Waters of the U.S. are areas below the ordinary high water mark of watercourses, ponds and lakes or areas below the high tide line in tidal areas.
- <sup>b</sup> Mitigation entails bridging wetlands or waters, use of pilings, and avoidance.
- <sup>c</sup> Totals are presented in square feet for waters of the U.S. and square feet and acres for wetlands.
- <sup>d</sup> The above Wetland Impact table is based on a surveyed map which has been field verified by the Corps of Engineers.

The following combination of mitigation measures shall be implemented to reduce these impacts to less-than-significant.

Mitigation Measure BIO-1a: The impact to wetlands from the Project River Trail shall be minimized by a design that minimizes fill.

Mitigation Measure BIO-1b: Fill of wetlands shall be minimized during repair or reconstruction of the levee for the proposed Project River Trail. Repair or reconstruction of the levee shall be done in consultation with the CDFG, National Marine Fisheries Service, USFWS, and the Corps. The City shall sign off on Corps mitigation plans requiring "no net loss" of wetlands.

Mitigation Measure BIO-1c: In areas where fairways span wetlands, fencing shall be provided to prevent entry into wetlands by golfers. Trails shall be routed across or around these wetlands to channel access within a small area. Tee areas, fairways, and holes shall be designed to minimize fill of wetland areas.

Mitigation Measure BIO-1d: The minimum width possible for Stanly Lane shall be maintained at the crossings of the watercourses.

Mitigation Measure BIO-1e: The grading plan shall be revised to avoid the wetland near the employee housing area. Best Management Practices (BMPs) shall be used to prevent sedimentation of this wetland during construction. (See the Hydrology, Drainage, and Water Quality section of Chapter IV for further explanation of BMPs.)

Mitigation Measure BIO-1f: The minimum width possible shall be maintained for the crossing of the Central Swale by the Emergency Vehicle Access (EVA) road.

Mitigation Measure BIO-1g: Impacts to wetlands for boring of the sanitary sewer line and reclaimed water line shall be avoided if at all possible. Bore and jack methods shall be used wherever feasible. If impacts to wetlands cannot be avoided from the boring for these lines, an equivalent amount of uplands within the North or South Lowlands shall be converted into wetland. The City shall sign off on Corps mitigation plans requiring "no net loss" of wetlands (affected wetland to wetland mitigation area). A biologist experienced in conducting wetland delineations shall delineate the area of impact. BMPs shall be followed to prevent sedimentation of the wetland in the South Lowlands if there are unforeseen impacts related to boring.

Mitigation Measure BIO-1h: A Wetland Mitigation Plan based on the Conceptual Wetland Mitigation Plan (WRA, 1998b) shall be approved by the Army Corps of Engineers and signed off by the City prior to approval of the Grading Plan. At a minimum, this Wetland Mitigation Plan shall identify the following goals and objectives: location and size of all areas of fill; location and size of mitigation areas; planting plans and site preparation specifications; an implementation and monitoring plan; the management organization responsible for the plan; and cost estimates sufficient to cover the cost of implementing and maintaining the wetlands. This Plan shall also identify methods of wetland creation and types of wetlands to be created. All mitigation shall occur on-site at a minimum 1:1 ratio; higher mitigation ratios are encouraged. Preferred mitigation areas include conversion of uplands to lowlands in the North and South Lowlands (Note: Uplands are now present within the North and South Lowlands), and removal of fill from railroad crossings to improve wetland connections. Performance standards shall include criteria for evaluating whether goals of the Wetland Mitigation Plan are being achieved over time, plant cover values and the provision that the mitigation wetlands be dominated by native species. Cocklebur (*Xanthium strumarium*), spiny clotbur (*Xanthium spinosum*), broad-leaved pepper-grass (*Lepidium latifolium*), and any other noxious weed shall not comprise more than ten percent relative cover of the mitigation wetlands. The Wetland Mitigation Plan shall include monitoring for five years. (LTS)

**Impact BIO-2: The proposed project would also result in indirect impacts to wetlands. These indirect impacts would consist of the pollution of wetlands by pesticides, fertilizers, petroleum products, sedimentation, and refuse. The proximity of people to the wetlands of the North and South Lowlands also results in reducing their habitat value for wildlife. (S)**

The proposed golf course and residential development could result in herbicides, insecticides, fungicides, fertilizers, petroleum products, and other pollutants entering these wetlands and drainages. Project construction could also result in sedimentation of wetlands.

The proximity of people and (potentially) their pets to the wetlands on the Stanly Ranch would reduce the value of those wetlands to wildlife. Human activities would disturb wildlife in the Lowlands wetland areas. Golf course holes 11 and 13 occur on the eastern side of the former railroad alignment. This recreational feature would bring people closer to the wetlands and would be a significant impact.

Four watercourses are crossed by Stanly Road. The winery would be located adjacent to the banks of two of these watercourses. Grading related to the winery would affect the banks of the drainages. Human intrusion into the area of these four



watercourses from the Bay Trail and winery and the project in general would affect the wildlife value of the watercourses.

People would approach the Lowlands area wetlands from the Project River Trail or either trail alignment alternative described in Appendix D. Pets could disturb and prey upon wildlife.

The following combination of mitigation measures shall reduce these impacts to less than significant.

Mitigation Measure BIO-2a: Mitigation Measure HYDRO-2 discussed in the Hydrology section of Chapter IV, shall be implemented to mitigate impacts from pollutants (pesticides, fertilizers, etc.) and sediment. Because the water quality impacts to receiving waters cannot be guaranteed to be less than significant after mitigation, this impact would remain potentially significant.

Mitigation Measure BIO-2b: A 100+ foot wide buffer shall be maintained between the edge of golf course landscaping (including any golf course path), and South Lowlands wetland areas for at least 90 percent of the length of the golf course. For 10 percent of this length, reductions may be approved by CDFG in exchange for added landscaping or other enhancements, but in no case shall the buffer be less than 50 feet. The buffer shall be a component of the site's natural open space and shall be designed to function as wildlife habitat; people shall be excluded from the buffer area.

The buffer shall be planted with trees and shrubs to screen people from the wetlands and to provide cover for wildlife escaping the Lowlands areas during flooding. Suitable trees would include those native trees already growing on the Stanly Ranch. These species include coast live oak, black oak, valley oak, black walnut, and California buckeye. Suitable shrubs include snowberry (*Symphoricarpus albus*) (if beneath the tree canopy), California rose (*Rosa californica*), California lilac (*Ceanothus thrysiflorus*), coffeeberry (*Rhamnus californica*), coyote brush (*Baccharis pilularis*), red berry (*Rhamnus crocea*), toyon (*Heteromeles arbutifolia*), California blackberry (*Rubus ursinus*), and Eastwood's manzanita (*Arctostaphylos glandulosa*). Herbaceous species, such as fathen, shall be planted at the margin of the wetland to further increase the cover of the vegetation and increase the effectiveness of the vegetational screen for wildlife (especially salt marsh harvest mice).

Mitigation Measure BIO-2c: Paths to and from golf course holes 11 and 13 shall be developed and fenced to maintain the greatest buffer width possible, but no less than 100 feet wide, between wetlands and the golf course. Signs

shall explain the sensitive nature of the wetlands, the importance of the buffer, and the role of buffer plantings.

Mitigation Measure BIO-2d: The proposed Project River Trail Northerly Loops (Loops 1N and 2N) shall be located inland from the edge of the levee approximately 100 feet where possible in order to permit and provide a buffer between people (and potentially their pets) and the wildlife of the wetlands/river.

Mitigation Measure BIO-2e: The Project River Trail shall provide native landscape buffers wherever possible to reduce impacts of human intrusion on wildlife habitat. Such landscaping shall be included in the final Wetland Mitigation Plan and incorporated into the final design. Buffer plants shall be selected from the list in Mitigation Measure BIO-2b above or similar appropriate native species matched with proper site and planting conditions.

Mitigation Measure BIO-2f: In an appropriate location or locations, signs shall explain the sensitive nature of wetlands, the importance of staying on the designated trail or golf cart path, and the role of buffer plantings.

Mitigation Measure BIO-2g: Project River Trail operating rules shall prohibit dogs or require that dogs be kept on a leash.

Mitigation Measure BIO-2h: Mitigation Measure HYDRO-2 shall be implemented to reduce trail construction sedimentation impacts.

Mitigation Measure BIO-2i: Dense riparian plantings shall be established on the banks of the drainages that cross the panhandle and the proposed vineyard on the east side of the highway. These plantings shall occur in two bands, each band on either side of each drainage. These bands shall be 50-foot wide beginning from the top of each bank. The species listed in the *Riparian Enhancement Plan for Stanly Ranch, Napa, California* are suitable for planting along these drainages. Planting shall stop where the salinity of the soil of the North Lowlands hinders growth. (PS)

**Impact BIO-3: Blue gum eucalyptus trees are proposed for removal along Stanly Lane and Old Suscol Road and from the interior of the site. Several species of native trees are also proposed for removal along Stanly Lane. The removal of eucalyptus and native trees would remove nesting, perching, and foraging habitat for raptors and songbirds. (S)**

Native trees that occur along Stanly Lane include valley oak, black oak, coast live oak, black walnut, California buckeye, and willow. This is one of the few locations

where native trees occur on the site, and one of the few locations where trees could remain after Stanly Lane is widened.

The removal of most trees along Stanly Lane and other areas of the site would be a significant impact because of the removal of the majority of nesting habitat at Stanly Ranch for raptors. The proposed removal of eucalyptus and other ornamental trees would result in the loss of four red-tailed hawk and red-shouldered hawk nests. Other raptors that could nest on-site include white-tailed kite, Cooper's hawk, great horned owl, and long-eared owl. This tree removal would not affect any formally-listed species, including formally-listed raptors.

Hawks have not been observed nesting in the trees along the Napa River and Horseshoe Bend levees.

The proposed replanting plan for Stanly Lane and Old Suscol Road would include planting native species that are indigenous to the vicinity of Stanly Ranch (coast live oak and other oaks, California bay, California buckeye, western sycamore, and white alder and coast redwood), native species that are not indigenous to the vicinity of Stanly Ranch (Douglas fir), and non-native ornamental species (bald cypress, Atlas and Deodora cedar, tupelo, black locust, Lombardy poplar, London plane tree, apple, pistache, linden, and maple). Native black walnut trees would be planted in an orchard setting at the entrance to Stanly Ranch. These trees would mostly be planted along Stanly Lane and Old Suscol Road, the Bay Trail, and near adjacent buildings.

The replacement of eucalyptus with Lombardy poplar along Old Suscol Road would not replace raptor nesting habitat lost with the removal of eucalyptus because hawks do not appear to nest in the very narrow crown of Lombardy poplar.

Removal of eucalyptus and replanting with other, more varied tree types, particularly native trees, is expected to have a positive biological effect as new trees grow. Studies conducted for the California Department of Parks and Recreation concluded that no species was found to be dependent on eucalyptus, and that a larger and more diverse avifauna occurred in native stands compared to eucalyptus stands on Angel Island (Morrison and Keane, 1988).

Although there would be a lag of time until young replacement trees would provide nesting and perching habitat, the following mitigation measures would render the impact less than significant because trees remaining on the site and trees remaining in the vicinity of the site would serve as habitat while new on-site trees are maturing.

Mitigation Measure BIO-3a: Three native trees shall be planted for every native tree removed due to widening of Stanly Lane. Replanted trees shall be



the same species as each tree that is removed. Planting of these trees shall occur along the drainages crossed by Stanly Lane in the panhandle. Coordination shall occur between implementing this mitigation measure and Mitigation Measure BIO-2b.

Mitigation Measure BIO-3b: The applicant shall implement the tree replanting plan, including tree rows along both sides of Stanly Lane and Old Suscol Road. Mitigation Measures BIO-2i, BIO-4, and BIO-11 shall also be implemented to partially mitigate loss of raptor perching, foraging and nesting habitat. (LTS)

**Impact BIO-4: Removal of on-site trees may result in direct impacts to nesting raptors. (S)**

If trees are removed during the nesting season, raptors could be killed. This potential impact is most likely during February through July. Although formally listed species of raptors are not expected to be affected by the removal of eucalyptus trees, eucalyptus removal is still significant for the following reasons: 1) Raptors are of particular concern because they are at the top of the food chain and are more sensitive to habitat disturbance than are other species of birds; and 2) the tree removal proposed for this project results in a substantial change of wildlife (raptor nesting and perching) habitat.

Mitigation Measure BIO-4: From February through July, a pre-construction survey shall be conducted for nesting raptors within 30 days of construction to determine if raptors are nesting in trees slated for removal. Buffers 100 feet wide shall be established around each active nest encountered during the pre-construction survey. These buffers shall be maintained until the young have fledged. (LTS)

**Impact BIO-5: The proposed project would remove a stand of California oatgrass grassland, a sensitive habitat type, approximately 37,400 square feet (0.86 acre) in size. (S)**

California oatgrass grassland is dominated by California oatgrass, a native species. This type of grassland is rare in California and has experienced a reduction in distribution due to conversion to agricultural and urban uses. Mitigation is warranted for this plant community because it is rare in California, is a remnant of the original vegetation of the site, and continues to experience impacts throughout its range.

Mitigation Measure BIO-5: An equivalent amount of California oatgrass grassland shall be established on the project site to mitigate for the stand removed by the project. The North Lowlands appears to provide suitable soils and hydrology for California oatgrass. Candidate mitigation areas shall not be dominated by native plant species because removal of native plant habitat could constitute a significant impact. (LTS)

**Impact BIO-6: Impacts to Mason's lilaeopsis, a State-listed, rare plant species, could result from repair of the levee along the Napa River or from construction of a trail along the top of the levee. (S)**

Mason's lilaeopsis occurs in tidal areas. Construction on the levee could result in soil being pushed onto and thereby destroying stands of Mason's lilaeopsis.

Mitigation Measure BIO-6a: Prior to construction of any trail or repair of any portion of the levee along the Napa River, surveys shall be carried out for Mason's lilaeopsis. Site conditions (area of stand, number of plants, plant cover, associated species, topography, tidal regime, etc.) shall be documented for each of the stands of Mason's lilaeopsis encountered. Construction shall avoid impacts to stands of Mason's lilaeopsis. These stands shall be fenced and the fenced areas noted on project grading plans as areas to be protected. Any stands of Mason's lilaeopsis adversely affected or destroyed by construction shall be replaced. A plan to replace the stand(s) shall be developed in consultation with and approved by the California Department of Fish and Game (CDFG).

Mitigation Measure BIO-6b: Any soils from project construction shall not be pushed onto stands of Mason's lilaeopsis. Contractors shall be made aware of this condition by way of established construction standards.

Mitigation Measure BIO-6c: The proposed Project River Trail Northerly Loop 1N and Future Southerly Loop shall be located inland from the edge of the levee approximately 100 feet where possible in order to minimize potential impacts on Mason's lilaeopsis. (LTS)

**Impact BIO-7: Impacts to nesting salt marsh common yellowthroat, a special status species, could result from repair of the levee along the Napa River or from construction of a trail along the top of the levee. (S)**

At the project site, nesting habitat for the salt marsh common yellowthroat occurs in the marsh vegetation along the Napa River levee. Any work along the levee for levee repair or establishment of the Project River Trail or maintenance of the trail could affect nesting habitat of the salt marsh common yellowthroat.

Mitigation Measure BIO-7a: Prior to construction of any trail or repair of any portion of the levee along the Napa River, surveys shall be carried out for nesting salt marsh common yellowthroats. Construction shall avoid impacts to nests of salt marsh common yellowthroats. These nests shall be fenced and a 100 foot buffer established around the nest location. The nest(s) shall be noted on project grading plans.

Mitigation Measure BIO-7b: Any soils from project construction shall not be pushed into areas supporting nests of salt marsh common yellowthroats. Contractors shall be made aware of this condition by way of established construction standards. (LTS)

**Impact BIO-8:** Impacts to listed fish species (tidewater goby, winter-run chinook salmon, coho salmon, Central California steelhead and delta smelt) could result from repair of the levee along the Napa River or from construction of a trail along the top of the levee. (S)

Construction on the levee may generate silt and sediment that could enter the Napa River during the period of time that these listed fish species may be present. This silt and sediment may harm these species and, although unlikely, may reduce their number.

Mitigation Measure BIO-8a: Prior to construction of any trail or repair of any portion of the levee along the Napa River, consultation shall occur with CDFG, National Marine Fisheries Service, USFWS, and the Corps. Measures to minimize impacts to the Napa River adjacent to wetlands and to limit the generation of silt shall be instituted as described in mitigation measures for Impacts BIO-1, BIO-2 and HYDRO-2.

Mitigation Measure BIO-8b: Best Management Practices (BMPs) shall be implemented to reduce the amount of silt produced. Because the water quality impacts to receiving waters and the fish cannot be guaranteed to be less than significant after mitigation, this impact would remain potentially significant. (PS)

**Impact BIO-9:** Impacts to special status fish species (longfin smelt, green sturgeon, river lamprey, Pacific lamprey, and Sacramento splittail) could result from repair of the levee along the Napa River or from construction of a trail along the levee. (S)



Construction on the levee may generate silt and sediment that could enter the Napa River during the period of time that these fish species are potentially present. Given the proposed project's rigorous water quality measures, these activities would not substantially reduce their habitat.

Mitigation Measure BIO-9a: Prior to construction of any trail or repair of any portion of the levee along the Napa River, consultation shall occur with CDFG, National Marine Fisheries Service, USFWS, and the Corps. Measures to minimize impacts to wetlands and to limit the generation of silt shall be instituted as described in mitigation measures for Impacts BIO-1, BIO-2 and HYDRO-2.

Mitigation Measure BIO-9b: BMPs shall be implemented to reduce the amount of silt produced. The applicant shall avoid disturbance to the water of the Napa River and shall time construction to avoid impacts during spawning. (LTS)

**Impact BIO-10: Impacts could occur to salt marsh harvest mice, a listed and fully protected species present in the South Lowlands, due to increased human activity and predation due to house cats kept as pets by the residents. (S)**

Salt marsh harvest mice are an endangered species (federal and state lists) and have been observed in the South Lowlands. The proposed project would not have any significant direct adverse impacts on salt marsh harvest mice. Nevertheless, the project would likely result in significant adverse indirect impacts on salt marsh harvest mice. Potential indirect impacts would include: 1) increased use of mouse habitat by residents, including upland buffer areas; 2) increased intrusion into the habitat by domestic and feral cats; and 3) increases in the number of competitor species, including house mouse (*Mus musculus*) and predator species, such as raccoon, rats, and skunks.

The population of salt marsh harvest mice at the site is likely to be small because its habitat becomes flooded for a month or more each year. The small number of specimens that were captured during surveys provides further evidence of the small size of this population. An increase in disturbance could result in the extirpation of this population.

The wetland area of the South Lowlands is considered to be habitat of the salt marsh harvest mouse. To offset increases in disturbance, buffer plantings in upland areas, predator management and habitat protection and improvement are all necessary mitigation measures.

Mitigation Measure BIO-10a: Mitigation Measure BIO-2b shall be implemented. The required buffer shall provide sufficient cover to hide salt marsh harvest mice especially when their habitat is flooded for a month or more during the winter.

Mitigation Measure BIO-10b: The Future Southerly Loop trail alignment shall be revised in the southwestern corner of the railroad bed to trend northwesterly around existing wetlands, then back south at the west edge of the property line to provide a minimum 100-foot buffer distance to salt marsh harvest mouse habitat. This would necessitate a minor revision to proposed lots in Neighborhood 4 and minor wetland fill at the western edge of the property to reconnect this future trail back to the railroad bed.

Mitigation Measure BIO-10c: No temporary staging areas, stockpiling of equipment or construction materials, placement of any dredge or fill material, or artificial lighting, shall occur in or impinge upon the South Lowlands wetland areas unless approved by the USFWS.

Mitigation Measure BIO-10d: A predator management plan shall be prepared by the project applicant, which shall include, but not be limited to, adequate funding for U.S. Department of Agriculture Wildlife Service personnel to conduct predator management.

Mitigation Measure BIO-10e: A plan shall be implemented, in coordination with the USFWS, to restrict public access (e.g. use of fences, barriers, landscaping, and signs) to the maximum extent feasible in the South Lowlands. The plan shall incorporate the Project River Trail alignment. The plan must be reviewed and approved by USFWS prior to initial project occupancy.

Mitigation Measure BIO-10f: The following activities shall be prohibited in the South Lowland wetland areas: 1) alteration of existing topography except for the minimum needed for levee maintenance or implementation of a wetland restoration plan approved by the USFWS; 2) placement of any new project-related structure unless approved by the USFWS; 3) dumping or burning of any garbage, waste, or fill material unless approved by the USFWS; 4) killing, removing, alteration, or replacement of any existing native vegetation unless approved by the USFWS; and 5) use of any pesticides or herbicides unless approved by the USFWS.

Mitigation Measure BIO-10g: Habitat of the salt marsh harvest mouse shall be improved by increasing the drainage from the South Lowlands. This increased drainage shall occur by adding culverts that would drain the South

Lowlands area. The culverts shall have flap gates that would prevent water from entering the South Lowlands from the Napa River. (LTS)

**Impact BIO-11: Project-related activities may result in impacts to special status species (nesting short-eared owl, northern harrier, western burrowing owl, and California horned lark). (S)**

Although not currently observed nesting on the Stanly Ranch, these species may colonize the project site prior to grading. These species could potentially nest in the grasslands of the uplands or herbaceous hydrophytic vegetation of the Lowlands portion of the site. If they were to nest on-site during grading, their nests could be destroyed.

Mitigation Measure BIO-11: Pre-construction surveys shall be conducted within a period of 30 days prior to construction to determine if these species have colonized the site. Surveys for western burrowing owls shall follow CDFG burrowing owl survey protocol. If construction is proposed during the breeding season and these species occupy the site, a buffer 200-feet wide shall be established around nests for northern harrier and short-eared owl, and buffers 100 feet wide around nests for western burrowing owl and California horned lark. (LTS)

**Impact BIO-12: Project-related activities may result in impacts to various sensitive bat species. (S)**

Although not currently observed on the Stanly Ranch, these species may colonize the project site prior to grading. If they were to roost on-site during grading, their nests could be destroyed.

Mitigation Measure BIO-12: Pre-construction surveys shall be conducted within 30 days prior to removal of any existing buildings to determine if any special status bat species have colonized the site. If construction is proposed during the breeding season, and breeding colonies have colonized the site, the habitat of the breeding colonies shall not be destroyed during the time that the bats are present. After the young are independent and the colony is no longer using the buildings, the buildings can be removed. (LTS)

**Impact BIO-13: Proposed development may prevent the movement of wildlife to and from the Napa River (common deer, raccoons, etc.). (S)**

The Napa River is an important part of the habitat of the wildlife on and adjacent to Stanly Ranch. Preventing access to the water and cover afforded by the river and riparian environment would be a significant impact.



Mitigation Measure BIO-13: Corridors shall be planted across the site to allow the movement of wildlife from the Napa River to upland areas beyond the Stanly Ranch site. Upland corridor plantings shall occur along the project site border at Neighborhood 4 and extend along the border to the Bay Trail. These plantings shall be at least 15 to 50 feet wide. Other wildlife corridors include the drainageways described in BIO-2i where planted areas along the drainages shall average 50 feet on each side. (LTS)

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## G. HISTORIC AND CULTURAL RESOURCES

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This section of the EIR considers the effects of the *Draft SRSP* on known archaeological and historic resources located within the project site. This analysis: 1) defines the inventory of known archaeological and historic resources; 2) evaluates the significance of each resource with reference to significance criteria defined by CEQA and Section 106 of the National Historic Preservation Act (NHPA); and 3) discusses potential impacts on archaeological and historical resources.

Information presented in this section is derived from existing data as well as from site surveys conducted for the EIR. No new archaeological investigations were undertaken. Historical research was completed to clarify information provided in reports prepared for earlier archaeological and historical investigations at the project site.

In 1991, the firm of Holman & Associates conducted a review of ethnographic and historical literature and maps, archaeological base maps, site records, and survey reports on file at the Northwest Information Center (NWIC) of the California Historical Resources Information System office at Sonoma State University, as a component of their contract with Roma Design Group. The literature search revealed no recorded archaeological resources within the project site. At least three prior archaeological investigations had been conducted on lands included within the project site (Holman, 1991). These included lands on the northern border (Melandry, 1981), much of the western section (Sheeders, 1981), and a portion of the project site that was the subject of a study of proposed dredge disposal sites (Moratto, 1974).

A field investigation of the project site by Holman & Associates also did not result in the identification of any prehistoric or historic archaeological sites; however, a number of historic-age and potential historic-age structures and features were recognized (Holman, 1991). Prior to the Holman study, reports of field investigations make no mention of formal inspection of the ranch complex, outlying structures, the four bridges which cross drainages along Stanly Lane, an abandoned railroad grade on the eastern edge of the floodplain, nor the possible location of the Suscol Ferry Landing, all potentially historic features. The listing of the Stanly

House and Stanly Lane on the State Inventory of Historic Resources (SIHR) comprises the sole official documentation of the cultural resources.

Attempts to contact the Suscol Indian Council (SIC) to solicit their concerns regarding the project site in October 1997 were unsuccessful. Following this, inquiries were made to the Native American Heritage Commission about the status of the SIC which also proved unproductive. No active telephone numbers for the SIC were available.

## 1. Setting

a. General Plan Policies. Existing *General Plan* policies related to Historic Preservation state that historic and cultural sites shall be conserved by the following actions: continuing the Historic Preservation Ordinance and Cultural Heritage Commission; strengthening the ordinance; and using the historical inventory to identify and document individual sites. Uses other than the original use shall be considered in protecting historic sites and structures.

The *Draft General Plan* devotes a chapter to historic resources. Proposed policies state the City shall identify historical buildings, objects and features which are part of the city's cultural heritage; update and amend its historic resources inventory; strengthen its ordinances and procedures regarding projects affecting historical resources; use federal and state procedures for identifying, preserving and protecting prehistoric sites; require investigation during the planning process in archaeologically sensitive areas; and continue to enforce state mandates regarding archaeological resources. The Stanly Ranch site has not been on the City's historic resources inventory given its location outside of the historic core; however, in such cases, the environmental review process is used to determine historic and archaeological significance of site resources and to add to the City's historic inventory.

b. Ethnographic and Prehistoric Setting. Ethnographic and ethnohistoric data were compiled by Randall Milliken for the Roma Design Group study. His research revealed that the project site was situated within the region formerly occupied by speakers of the Patwin language of the Utian family of languages. Information about the specific native groups occupying the Horseshoe Bend locality of the lower Napa River was very limited. As a result, most information was extrapolated from accounts describing nearby Patwin speakers. The Suscol Indian town-site, situated across the Napa River from the project site, was reportedly depicted on a land grant map of the Rancho Tulucay for 1837. The Suscol location may have been the site where General Mariano Guadalupe Vallejo, commander of the northern military district, stationed Indian soldiers during the years 1839-1840. Milliken identified



both the Suscol and Tulucay locations as associated with the Mexican Rancho Period, 1834-1846 (Milliken, 1991).

The prehistory of the Napa District encompasses a time period from more than 5000 years ago to Euro-American expansion. Bennyhoff, a pre-eminent scholar of California's prehistory, identified and named a provisional series of eleven temporal phases within three cultural patterns<sup>1</sup> (Bennyhoff, 1977; Moratto, 1984). The earliest of phases was termed the Hultman Phase (circa 5000-3000 before present [b.p.] or later—since redefined as an Aspect of the regional Mendocino Pattern) was first identified by Fredrickson at archaeological site CA-NAP-131<sup>2</sup> in the upper Napa Valley (Fredrickson, 1973) (see Table IV.G-1). This assemblage of artifacts recovered from excavations at this site was marked by millingstones, concave-base and lanceolate projectile points, and a variety of other flaked stone tool forms. Among others, archaeological site CA-NAP-15, the Suscol site situated on the east bank of the Napa River opposite the project site, yielded basalt core tools from the lowest excavation layers associated with three radiocarbon dates between 3340±75 and 3605±100 years before present (Stradford and Schwaderer, 1981).

Berkeley Pattern assemblages (2000-1200 b.p.) have been identified at several sites in the Napa District. These assemblages are typically composed of mortars and pestles, obsidian shouldered lanceolate projectile points, flexed internments, an array of bone artifacts, several types of *Olivella* beads, and often distinctive charmstones. These assemblages could represent use of the area by populations ancestral to the ethnographic Miwok people.

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<sup>1</sup> Archaeologists use a system of terminology to order prehistoric cultural units. The Central California Taxonomic System (CCTS) was comprised of sequences defined as Early, Transitional, and Late Horizons; later Middle Horizon was substituted for Transitional (Beardsley, 1954). Difficulties implementing the CCTS in an adequate manner to address aspects of cultural change and regional differences in assemblages led Bennyhoff and Fredrickson to revise the taxonomic system--consistent with recent work from the Southwest U.S. (Bennyhoff and Fredrickson, 1969). This system assigned broader assemblage and culture traits to a *pattern*, an integrative cultural unit devoid of temporal implications. A pattern was defined as "a basic adaptation generally shared by a number of separate cultures over an appreciable period of time within an appreciable geographic space" (Bennyhoff and Fredrickson, 1969). In this system, smaller units are defined as aspects and phases--aspects are district variants of patterns and can be comprised of a sequence of phases. Phases are the smallest integrative unit in the taxonomy--defined as "an archaeological unit possessing traits sufficiently characteristic to distinguish it from all other units similarly conceived, whether of the same or other cultures or civilizations, spatially limited to the order of magnitude of a locality or region and chronologically limited to a relatively brief interval of time" (Willey and Phillips, 1958). Geographic units are defined as the site, locality, and district. This system was designed with the objective of better integrating elements of culture and social relationships with archaeologically defined units.

<sup>2</sup> CA-NAP-131 refers to the one-hundred and thirty-first archaeological site recorded in Napa County. It is a trinomial comprised of the state, county, and site number--part of a system used nationwide to identify archaeological resources; managed in California by the Office of Historic Preservation.

**Table IV.G-1  
NAPA DISTRICT CULTURAL SEQUENCE**

Dating Scheme	Napa District Phase	Pattern
A.D. 1800	Historic WAPPO	
1700	Late LYMAN	AUGUSTINE
1500	Early LYMAN	
1300	DAVIS	
1100	OAKVILLE	
900	BRIDGE	
500	RIVER GLEN	
300		
A.D. 100		
B.C. 200	GODDARD	
500	KOLB	
1000	RUTHERFORD	
1500	BALE	
B.C. 3000	HULTMAN <sup>a</sup>	MENDOCINO

<sup>a</sup> Redefined as Aspect of Mendocino Pattern (White and Fredrickson, 1992).

Source: Table after Bennyhoff, 1977.

The Augustine Pattern is thought to represent the arrival of the ethnographic Wappo into the region. Assemblages ascribed to this pattern contain small serrated and non-serrated obsidian corner-notched arrow points, mortars and pestles, rectangular *Olivella* beads, circular *Haliotis* pendants, steatite ear spools, collared stone pipes, incised bird bone whistles, and in the later phases, clam disk and magnesite beads, and the hopper mortar. Flexed interments remain the normative burial treatment but cremation and preinternment burning became increasingly common as time progressed. Sites containing Augustine Pattern assemblages are fairly widespread throughout Central California representing an expansion of local populations. Augustine Pattern traits continue throughout the region until the time of Euro-American contact.

c. Historic Landscape and Architecture Setting.<sup>3</sup> Historic resources still extant on the Stanly Ranch include:

- Stanly Lane and Old Suscol Road, including their adjacent windrows;

<sup>3</sup> A copy of the "Historic Architecture and Landscape Evaluation for the Stanly Ranch Specific Plan EIR" is available for review at the City of the Napa Planning Department.

- Four stone bridges on Stanly Lane;
- The Stanly House;
- The four ranch buildings adjacent to the Stanly House, including the fruit dryer, the carriage house, the foreman's house and vehicle/tool shed; and
- The concrete cistern.

During the Spanish period, the Stanly Ranch would have been under the control of Mission Solano, located in the pueblo of Sonoma. Founded in 1823, the Sonoma Mission was the northernmost and the last mission founded by the Spanish. After Mexico seceded from Spain in 1822, grants of land to private citizens became more common, especially to military officers. After the secularization of the missions began in 1833, the number of land grants increased substantially. Mission Solano was secularized in 1834. In 1836, Nicholas Higuera, the alcalde at Sonoma, received two grants from Mexican governor, Mariano Chico: one for *Entre Napa Rancho*, and a second adjacent 2,558-acre grant for *El Rincon de los Carneros*, the area that later became the Stanly Ranch. The original *Rincon de los Carneros* grant included the area between the Napa River and Carneros Creek south of what is approximately the east-west line of the present State Route 12. Higuera apparently never lived on the land that included his two Napa grants. Like most rancho owners, he ran large herds of cattle raised for their hides and tallow, the state's main export during the Mexican period. In 1847, Higuera sold the *Rincon de los Carneros* to Mateo Fellom.

In 1848, California became a United States territory as a result of the Treaty of Guadalupe Hidalgo which ended the war with Mexico. California was not formally admitted as a state until 1850. On July 1, 1850, Mateo Fellom sold the Carneros rancho to Julius Martin for 2,000 pesos, the earliest recorded transfer of the property. Martin sold the Carneros rancho to Edward Stanly on May 28, 1856 for \$5,000. Julius Martin did not build any structures on the Carneros ranch and he never lived on the property.

Born in 1810 in North Carolina, Edward Stanly, the original namesake for the Stanly Ranch, was an attorney active in politics. He was elected to Congress as a Whig several times in his home state. Stanly moved to San Francisco in 1853 where he established a successful law practice. Edward Stanly never lived at *Rincon de los Carneros*, nor did he maintain a resort or summer home on the property. Like many wealthy landowners of his time, Stanly had an agent manage his land. The assessor records show that Stanly paid only nominal property taxes for improvements for the Carneros property during the years of his ownership. In 1863, Stanly sold about 700 acres reducing the size of his ranch to 1,858 acres and decreasing its assessed value (including personal property) to \$30,000. Edward Stanly died in San Francisco in 1872. The 1876 Official Map of Napa County shows that primarily land between



Suscol (now Cuttings Wharf) Road and Carneros Creek had been sold off of the original 2,558-acre Carneros rancho.

After Edward Stanly's death in 1872, his nephew John Stanly, and other descendants, inherited the 1,858 acre Stanly ranch. During the next year, John Stanly purchased the interests of his other relatives until he owned the entire ranch. Although not a political figure of the prominence of his uncle, John Stanly was also an attorney who gained some recognition when he was appointed to the Superior Court in San Francisco in 1872. In 1890, Stanly was nominated to be the chief justice of the California Supreme Court, but was defeated at the polls. Born in Newbern, North Carolina in 1840, John Stanly moved to San Francisco when he joined his uncle's law office, Stanly, Hayes & Stanly, in 1866. A resident of Oakland for almost 30 years, John Stanly, like his uncle, was an absentee owner of the Stanly Ranch. However, unlike his uncle, John Stanly took a much more active role in managing the ranch and in aggressively developing the property's agricultural potential. The extensive dairy and winery operation John Stanly developed was significant in the history of 19th century Napa Valley agriculture. Stanly regularly visited the property on weekends and he maintained a small cottage on the ranch, a building probably later expanded into the still extant vineyard manager's house and office.

Beginning in 1872, John Stanly improved the property for fruit orchards and an extensive dairy operation. John Stanly constructed a complex of 23 buildings during the next 20 years for the dairy, winery, orchard, and stock raising operations. The extent of John Stanly's improvements is reflected in the almost 50 percent increase in the ranch's total assessed value from \$30,000 during the 1860s to \$44,230 in 1875 (Napa County Assessor Rolls). According to 1875 assessor records, these early improvements included a house, dairy houses, barns, sheds and windmills.

Other early improvements to the ranch included the planting of parallel rows of eucalyptus trees along the sides of Stanly Lane and the Suscol Road. The 1880 Napa Reporter article about the Stanly Ranch dairy indicated "the forty thousand eucalyptus trees" planted on the property were "three to six years old"; thus the trees were planted sometime between 1874 and 1877. The planting of the eucalyptus, which became a common practice on California ranches in the 1870s, was under the direction of ranch superintendent, Michael Flanagan, a native of Ireland. Flanagan was originally a tenant rancher on the Stanly Ranch soon after arriving in Napa County in 1870. After Edward Stanly's death in 1872, Flanagan became the superintendent of John Stanly's ranch, a position he held until 1896. Contemporary descriptions of the Stanly Ranch pointed out that the eucalyptus trees were "not only ornamental but useful" (Lewis Publishing Company, 1891). The trees purportedly made a perceptible difference in the climate by guarding against high winds, and even against frost. In 1889, the trees on the Stanly Ranch reportedly protected the

grape vines from a frost that destroyed many vines in other parts of the Napa Valley (Lewis Publishing Company, 1891).

In addition to the eucalyptus trees, Flanagan supervised the planting of the extensive vines and orchards on the ranch. Flanagan probably began planting the vineyards on the Stanly Ranch by 1878. A stone winery was constructed when the vines reached maturity in 1884 to 1885. A number of articles published in the late 1880s and early 1890s about the Stanly Ranch noted the sturdy wine cellar and praised the quality of the wines produced on the ranch (Anonymous, 1889; Wait, 1889; Lewis Publishing Company, 1891; Anonymous, 1892; Anonymous, 1893). *The Napa Register* of December, 1892 noted that John Stanly spent at least one day a week on his farm "in the workings of several departments" (Anonymous, 1892). Stanly's correspondence with Michael Flanagan reveals Stanly's considerable involvement in wine making on the ranch and his depth of knowledge of the latest developments in viticulture (Stanly, 1890s; Sullivan, 1994).

According to Napa County historian William Heintz, Stanly had "the only significant Carneros vineyard" to survive the phylloxera (a small root louse) epidemic of the 1890s. In an 1889 *Napa Register* article about the Stanly Ranch, Flanagan discussed John Stanly's pioneering role in developing phylloxera resistant, Riparia root stock in the Napa Valley (Anonymous, 1889).

*"We have been making wine for four years and produced 16 different kinds of claret. We are absolutely free from phylloxera, but this desideratum had been gained by planting resistants of which the Riparia is our favorite. Judge Stanly has made both scientific and practical experiments with vines and the result of his experiments and investigations is seen in our vineyards which might be taken as a model. We have 120 acres in vines and not one seems to be affected. The resistant vine will be the salvation and the only one of the valley."*

During the late 1880s, the grape varieties in the Stanly Ranch vineyard included Zinfandel (15 acres); Mataro (20 acres); Black Burgundy (15 acres); California Savignon and Franco (15 acres); Beclan (5 acres); Tinto Valdpunas (8 acres); Tannat (6 acres); Verdot (5 acres); Lenior (5 acres). During the 1880s and 1890s, the Stanly Ranch became "one of the most important wine growing operations in the county" according to Napa Valley historian Charles Sullivan (Sullivan, 1994). In his history of the Napa County wine industry, historian William Heintz points out that Stanly's "wines ranked second to no other vintner in the Napa Valley or county for quality" (Heintz, 1990). An 1893 article in *The Napa Daily Journal* noted that in the Stanly Ranch wine cellar "is stored some of the finest wines in the State" (Anonymous, 1893). Stanly Ranch wines were bottled in the City of Napa and sold under the "La Loma" label. Gustave Niebaum's Inglenook Winery and Gundlach-Bundschu in

Sonoma also bought wines from the Stanly Ranch. In 1891, Judge Stanly's wines demanded a price as high as forty cents a gallon, while other growers typically received from ten to fifteen cents a gallon. In addition to the vineyards, the sixty acres of orchards on the ranch in 1889 included 10 acres of pears, 30 acres of French prunes, 10 acres of Kelsey Japan plums, and an additional 10 acres of assorted other fruit.

Judge Stanly died in Oakland in 1899 and the ranch passed to his daughter, Catherine, also a resident of Oakland who never lived on the ranch. The only major parcel of the Stanly Ranch sold during the 27 years of John Stanly's ownership was an isolated 293-acre parcel in the area between Suscol (now Cuttings Wharf) Road and Carneros Creek. Catherine Stanly married Thomas B. Coghill, and their son, Edward S. Coghill, born in 1880, became the manager of the ranch in 1901.

The four stone bridges still extant on Stanly Lane were constructed in 1902 and 1906 (the construction date is carved into the abutment of each bridge) during the early years Edward Coghill lived on the ranch. It is likely that the large concrete cistern northwest of the intersection of Stanly Lane and Suscol Road was constructed between 1905 and 1915 after Coghill began managing the ranch. The extensive, poured-in-place concrete work used in building the cistern likely does not pre-date the early 20th century. In addition to new structures, Coghill added corn and potatoes to the other agricultural products cultivated on the ranch.

Catherine Stanly Coghill died in 1921 and the ownership of the Stanly ranch was divided between her son, Edward Coghill, and her daughter, Catherine Coghill Treanor. Edward Coghill continued to manage the entire ranch after his mother's death. After prohibition was enacted in 1919, the Stanly Ranch winery closed, and the vineyards were no longer maintained. The principal crops produced in the 1920s and 1930s were prunes and pears. Catherine Treanor's son, John, took over the operation of the ranch in the 1930s.

Grass burning by the Southern Pacific Railroad in July, 1936 started a fire along the railroad right-of-way over the Stanly Ranch property resulting in a spectacular mid-afternoon conflagration that consumed the wine cellar and fourteen ranch buildings (Anonymous, 1936). An adverse wind sent the fire north into the eucalyptus trees in the building section of the ranch. The fire eventually burned over 125 acres of the Stanly Ranch in two days and destroyed most of the eastern part of the ranch compound including several bunk houses, the cook house, the creamery, two barns, the milking shed, a two-story home, and a tool shed. The hay barn and the workers housing extant today were built in the late 1930s after the fire destroyed the eastern part of the building complex. About two years after the fire, the Southern Pacific railroad line through the Stanly Ranch was discontinued. By the early 1940s, Napa County maps show that the tracks had been removed.



In the 1930s, about another 600 acres of the Stanly Ranch along Stanly Lane and north of Suscol Road was sold. Catherine Treanor sold the last remaining 1,000 acres of the Stanly Ranch in 1945 to Jerome and Virginia Draper and George McFarland for \$125,000. With extensive vineyard holdings in Napa Valley, Draper planned to replant the Stanly Ranch vineyards. However, a 1965 aerial photograph shows only orchards planted on the Stanly Ranch that year. By 1964, the Stanly Ranch was annexed by the City of Napa in anticipation of the City's continued growth to the south. Since World War II, the Stanly Ranch has remained largely intact except for about 100 acres taken by eminent domain for the widening of adjacent State Route 29 in 1978. In 1981, the Drapers and McFarlands sold the Stanly Ranch to Carneros Valley Investors, a limited partnership. Today, the Stanly Ranch includes 918 acres of the original 2,558 acre *Rincon de los Carneros* rancho purchased by Edward Stanly in 1856. In recent years, the Stanly Ranch has primarily been used for grazing stock cattle, although a new vineyard was planted on the southwest portion of the property in the 1980s.

## **2. Impacts and Mitigation Measures**

### **a. Criteria of Significance.**

(1) California Environmental Quality Act. Under provisions of CEQA, the permit granting Lead Agency is responsible for determining whether a project will have a significant effect on archaeological resources (AB 952, effective January 1, 1983, adding Section 21083.2 to the Public Resources Code). If it is demonstrated that a project will damage a unique resource, the Lead Agency (in this case the City of Napa) may require efforts be made to preserve such resources through:

- redesigning the project to avoid impacts;
- deeding resources into permanent conservation easements;
- incorporating the resource into open space or parks; or
- capping the site with fill prior to development.

If a project will impact a unique archaeological resource, mitigation is required. Under Section 21083.2 of the Public Resources Code, a determination of "uniqueness" must be made for the archaeological resource. Unique archaeological resources are defined as:

- artifacts, objects, or sites which contain information needed to answer important scientific research questions without merely adding to the current body of knowledge, accompanied by a demonstrable public interest in that information;

- resources with a special and particular quality such as oldest or best example of its type;
- resources directly associated with a recognized important prehistoric or historic event or person.

Determining whether an archaeological resource meets one or more of the criteria for uniqueness requires high level evaluative data. Archaeological methods for determining the uniqueness of a site require controlled recovery of surface and/or subsurface data, and comparison of this information with the available regional archaeological record. This level of research must be conducted prior to the design and implementation of a mitigation treatment plan. The current statute also provides for public review of the evaluation process, including the determination of uniqueness. Appropriate mitigation measures can be recommended following a determination of uniqueness.

An archaeological evaluation plan is required to fulfill cultural resource protection requirements as defined by CEQA (Section 21083.2). Archaeological investigations to obtain information about the scientific value and significance/uniqueness of the site are to be based on fulfilling the following three criteria:

- determination of integrity;
- recovery of materials useful for addressing aspects of the research topics; and
- recovery of human remains. (The presence of human remains automatically qualifies the resource as unique.)

Assembly Bill 2881, adding Section 21084.1 to the Public Resources Code in 1992, provided more specific guidelines for identifying historic resources during the CEQA process. Under Section 21084.1, an historic resource eligible for the California Register would by definition be an historic resource for purposes of CEQA compliance. The *Draft Guidelines* for nominating resources to the California Register were published in May, 1995, and the final regulations are expected to be issued in August, 1998. Although current revisions to CEQA recognize a distinction between archaeological resources and historical resources, the procedures required for appropriate treatment within the planning process overlap. During the process of assessing the significance of an *archaeological resource*, the lead agency must first ask the question "is it unique?" If the finding is negative, it still must be determined if the resource qualifies as an *historical resource* as defined by state law. If the archaeological resource qualifies as an historical resource, it merits protection. Thus, non-unique resources might qualify for inclusion on the California Register regardless of their status as archaeological resources.

Under the regulations, a number of historic resources are automatically eligible for the California Register if they have been listed in and determined eligible for the National Register of Historic Places or the California Historic Landmarks program. Historic resources included in historic resource inventories prepared according to California State Office of Historic Preservation guidelines (and thus included in the State Inventory of Historic Resources) or designated under county or city historic landmark ordinances are presumed to be eligible if the designation occurred during the previous five years. Designations and surveys over five years old are required to be updated before their eligibility can be considered.

An historic resource not included in any of the above categories (National Register listed, etc.) must satisfy all of the following three criteria to be eligible for the California Register:

- meet one or more of the following four criteria of significance:
  - (a) *the resource is associated with events or patterns of events that have made a significant contribution to the broad patterns of local and regional history;*
  - (b) *the resource is associated with the lives of persons important to the nation or to California's past;*
  - (c) *the resource embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master, or possesses high artistic values; and*
  - (d) *the resource has the potential to yield information important to the prehistory or history of the state or the nation (this criterion applies primarily to archaeological sites);*
- the resource retains historic integrity (defined below);
- and it is 50 years old or older (except for rare cases of structures of "exceptional significance").

The California Register regulations define "integrity" as "the authenticity of an historic resource's physical identity, evidenced by the survival of characteristics that existed during the resource's period of significance" (State Office of Historic Preservation, 1997). That is, it must retain enough of its historic character or appearance to be recognizable as an historical resource. California Register regulations specify that integrity is a quality that applies to historic resources in seven ways: location, design, setting, materials, workmanship, feeling and association. A property must retain most of these qualities to possess integrity.

Appendix G in CEQA presents criteria for establishing a threshold with regard to significant effects to cultural resources caused by a project. A project may be



deemed to have a significant effect on the environment if it will, except as part of a scientific study:

1. Disrupt or adversely affect a unique archaeological resource;
2. Disrupt or adversely affect a significant paleontological site; or
3. Cause a substantial adverse change in the significance of an historical resource.

(2) National Historic Preservation Act. No federal funding or federal review of the project is anticipated. However, the criteria regarding a property's eligibility for the National Register of Historic Places are described below in case any federal agency involvement should occur in the future (i.e., U.S. Fish and Wildlife Service). If that is the case, cultural resources would be evaluated under Section 106 of the National Historic Preservation Act (NHPA). The mandate of Section 106 of NHPA requires each Federal agency to address how an undertaking could affect any historic properties (i.e., any site, district, building, structure, or object potentially eligible for, or listed on the National Register of Historic Places). Undertaking refers to a wide group of activities, such as construction, demolition, grants, loans, and property transfers. Should a proposed activity affect an historic property, the lead agency must request comments from the Advisory Council on Historic Preservation (ACHP). As required under the Section 106 process, Federal agencies engaged in undertakings which may affect historic properties must coordinate with the State Historic Preservation Officer (SHPO), ACHP, and other interested parties; this review process is mandatory.

The National Register of Historic Places is the official list of properties significant in American history, architecture, archaeology, engineering and culture and was designed to be used by the general public, local communities, state governments and federal agencies in their preservation planning efforts. The following criteria are used to evaluate an historic property's eligibility for the National Register of Historic Places.

*The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:*

- (a) *That are associated with events that have made a significant contribution to the broad patterns of our history; or*
- (b) *That are associated with the lives of persons significant in our pasts;*  
*or*

- (c) *That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinctions; or*
- (d) *That have yielded, or may be likely to yield, information important in prehistory or history.*

To meet the National Register standards, a property must possess the above criteria, be associated with an important historic context, and retain the historic integrity of features that conveys its significance (National Park Service, 1991).

Criteria a, b, and c above apply to the historic cultural resources identified on the Stanly Ranch site. Criterion d might apply to undiscovered prehistoric and historic archaeological resources. These resources are discussed in more detail below.

b. Cultural Resources.

(1) Prehistoric Resources (HIS-1 below). No prehistoric archaeological resources have been identified within the project site.

(2) Historic Resources (HIS-2 through HIS-3 below). A variety of historic cultural resources have been identified within the project site that still exist today. These include structures, bridges, transportation routes, and landscape features. Additionally, both the Stanly House and Stanly Lane are listed on the State Inventory of Historic Resources. There is also a high potential for buried historic materials and features on the property.

(a) *The Stanly House (vineyard manager's house), Fruit Dryer, and Three Related Buildings.* The Stanly Ranch was a significant 19th-century ranch and winery in the history of Napa County during the years John Stanly owned the property from 1872 to 1899. During this 27-year period, Stanly had over twenty buildings constructed and thousands of eucalyptus trees planted as windrows on the property. Stanly was a significant figure in the history of the Napa Valley wine industry because of his success in producing premium wines and for introducing phylloxera resistant root stock to the Napa Valley. During weekends, John Stanly lived in the ranch house originally constructed in 1872 and still extant today.

The Stanly House has significant associations with John Stanly who played an active role in managing the winery and vineyards on the property. Although remodeled and expanded, the house appears to retain integrity from its period of significance because the additions to the house appear to date from the 1890s when John Stanly

still owned the ranch. The Stanly House (later known as the vineyard manager's house) appears to be eligible for the National and California Registers because of its significance under Criteria A and B of the California Register and the National Register of Historic Places. The Stanly House is included in the Napa County Historic Resources Inventory.

Four buildings near the Stanly House – the fruit dryer, and the carriage house, the foreman's house and vehicle/tool shed – date from the period when John Stanly owned the ranch. The fruit drying building appears to be a rare surviving example of this type of 19th-century agricultural building in Napa County; thus it appears to be eligible under Criterion A of the California Register and National Register. Although not individually eligible, the other three buildings contribute to the historic significance and setting of the Stanly House. The hay barn, workers apartments, the garage near the Stanly House and the small pump house (northwest of the main building complex) date from the 1930s or later, and thus do not appear to be historically significant.

(b) *Stanly Lane, Old Suscol Road, Eucalyptus Windrows, and Stone Bridges.* Originally planted in the 1870s soon after John Stanly became the owner of the ranch, the double rows of eucalyptus trees (windrows) along Stanly Lane and Old Suscol Road are significant historic landscape features. The roads are also significant early Napa County transportation routes possibly dating from the 1850s. The windrows along the roads were originally planted to change wind patterns near the Stanly Ranch vineyards and orchards and to supply the ranch with firewood. Although only about 300 trees planted in the 19th century survive, the overall form and feeling of this landscape feature retains integrity because subsequent plantings have maintained the eucalyptus windrows. The 1,800 trees in the 1.5 mile long windrows along Stanly Lane and the 1,000 trees on Suscol Road have been identified as landscape features defining the character of southern Napa County and as one of the largest stands of blue gum eucalyptus in California (Brown, 1997).

Consequently, Stanly Lane and Old Suscol Road appear to be significant under Criteria A and C, and thus eligible for the National Register and the California Register. The trees are significant as components of the early agricultural development of the ranch and as an extant 19th century rural landscape design of unprecedented scale. Another character-defining feature of each resource is the historic road alignments. Four stone masonry bridges constitute an additional significant historic feature on Stanly Lane. Although the bridges date from 1902 or 1906 (thus later than the period of significance for the ranch itself), they are significant examples of arch masonry bridge construction in Napa County, the only county in California where stone was widely used for bridge construction. In addition to contributing to the significance and eligibility of Stanly Lane, the four bridges appear to be individually eligible for the National Register and the California



Register under Criterion C. The railroad grade lacks integrity and is not eligible for inclusion on the National Register or California Register.

(c) *The Concrete Cistern.* Dating from the early 20th century, the large concrete cistern was likely used for storing water for irrigating the extensive orchards and vineyards on the Stanly Ranch. Given its size and scale, the cistern appears to be a unique, surviving example of this type of structure, and thus appears to be significant in the history of Napa County agriculture. Consequently, the cistern appears to be eligible for the National Register and California Register under Criterion A because of its significance as part of the design of a large-scale irrigation system for a major Napa County ranch.

c. Less-Than-Significant Impacts. The following impacts have been determined to be less than significant but to require Conditions of Approval.

***Impact HIS-A: The Draft SRSP proposes to move the original ranch fruit drying building to a site near its current location to be reused as an Environmental Interpretative Center. (LTS)***

As part of the *Draft SRSP*, employee housing is proposed in the area where the Stanly Ranch buildings are now located. A structurally sound building, the ranch fruit drying building has been recently renovated and is currently the Stanly Ranch office. If the fruit drying building is moved to a new location on-site and its rehabilitation as an Environmental Interpretative Center is consistent with *The Secretary of Interior Standards for Rehabilitation and Guidelines for Rehabilitation of Historic Buildings* published by the U.S. Department of Interior (1992), this impact would have a less-than-significant effect.

Condition of Approval HIS-A: A Certificate of Appropriateness shall be obtained from the Cultural Heritage Commission for any future exterior rehabilitation of the fruit drying building. (LTS)

***Impact HIS-B: The project would reuse the historic stone bridges as part of the Bay Trail. Assuming the bridges would not be removed or modified, this aspect of the project would not have a significant effect. (LTS)***

The four bridges along Stanly Lane appear to be significant under Criterion C of the National Register and the California Register because they are significant examples of arch masonry bridge construction in Napa County, the only county in California where stone was widely used for bridge construction. A major benefit of the proposed Stanly Lane realignment with the proposed Bay Trail located along the historic roadway is that the bridges would remain intact.

Condition of Approval HIS-B: If any future reinforcement is needed, the four Stanly Lane bridges shall be reinforced and rehabilitated, rather than being dismantled and rebuilt as steel arch culverts. The rehabilitation of the bridges would be consistent with *The Secretary of Interior Standards for Rehabilitation and Guidelines for Rehabilitation of Historic Buildings* published by the U.S. Department of Interior (1992). This Condition of Approval would keep project impacts less-than-significant. (LTS)

**Impact HIS-C:** *The Draft SRSP would result in three ranch buildings adjacent to and contributing to the significance of the Stanly House being moved or demolished. (LTS)*

A 1993 structural evaluation identified serious structural deficiencies in these three historic Stanly Ranch buildings: the vehicle/tool shed, the carriage house, and foreman's house (Applied Structural Analysis and Design 1993). This evaluation concluded that rehabilitating these buildings would not be economically feasible. Although the feasibility of moving these three buildings has not been determined, it is unlikely that they retain sufficient structural integrity to be moved. Although these three buildings do not appear to be individually eligible as historic resources, the following Conditions of Approval are recommended regarding documentation and salvage because the buildings date from the period when John Stanly owned the Stanly Ranch and thus contribute to the setting of the Stanly House.

Condition of Approval HIS-C1: It may not be feasible to move or reuse the other three historic Stanly Ranch buildings - the vehicle/tool shed, the carriage house, and foreman's house. Prior to demolishing or salvaging parts of these three buildings, the buildings shall be documented according to the Outline Format described in the Guidelines for the Historic American Building Survey (HABS) published by the Western Regional Office of the National Park Service. This documentation shall include archival quality, large format (minimum 4 by 5 inch) photographs of the exterior and interior of the building. Sketch floor plans of the buildings should also be included as part of the HABS documentation. A copy of the documentation, with original photo negatives and prints, should be donated to an historical archive accessible to the public, like the Napa County Historical Society, other suitable local history collection.

Condition of Approval HIS-C2: The applicant shall preserve any features of historic interest in the three buildings, and incorporate these features into the design of new buildings proposed for the Stanly Ranch. If the building is to be demolished, the applicant shall contact representatives of the Napa County Historical Society, Napa County Landmarks and the Napa Cultural Heritage Commission, and other interested parties. The representatives of these groups

shall have an opportunity to examine the buildings and provide suggestions for salvaging elements of the buildings. (LTS)

d. Significant Impacts. The following impacts have been determined to be significant or potentially significant and to require mitigation measures.

**Impact HIS-1: Unanticipated discovery of archaeological resources could occur with development proposed as part of the *Draft SRSP*. (S)**

Although no prehistoric archaeological resources have been identified in the project site, similar environmental settings typically contain Native American cultural materials and deposits. Construction at the project site has the potential to yield subsurface prehistoric cultural deposits. Additionally, there is a high potential that the project area contains buried historical archaeological deposits and/or architectural elements associated with former or existing buildings and other facilities which may be affected by project construction plans.

Mitigation Measure HIS-1a: A project archaeologist shall be hired for the construction phase of the project. A plan for further necessary evaluation shall be developed by the project archaeologist after review of construction plans which clearly outlines potential impacts to these resources. Mechanical trenching shall be undertaken in areas of former structures and in or around the locations of existing structures after their removal to locate actual historical material deposits or architectural features. Through this process, the presence or absence of related deposits can be demonstrated, and where located, the aerial extent and depth of the deposit mapped.

Mitigation Measure HIS-1b: In those cases where deposits or other forms of historical information are located and where project-related impacts would unavoidably occur, evaluative testing of the deposits shall be undertaken to identify resources and demonstrate significance. This testing can take the form of a combination of mechanical soil removal and hand excavation. Following completion of this identification and evaluation phase, full recording of all cultural resources shall be conducted. Mitigation of impacts to a less-than-significant level would depend upon a number of factors including a determination of whether the resource qualifies as "historical" under CEQA. If any archaeological materials or objects are unearthed during project construction, all work in the vicinity shall immediately halt until a qualified archaeologist is retained to evaluate the finds. The developer shall comply with all mitigation recommendations of the archaeologist prior to commencing work in the vicinity of the archaeological finds.



Mitigation Measure HIS-1c: If subsurface prehistoric or historic deposits containing human remains are discovered during earth moving activities, the find shall be considered significant and shall be reported to the County Coroner. All work in the vicinity shall immediately halt until a qualified archaeologist is retained to evaluate the finds. Responsibility for human remains discovered during project activities comes under the jurisdiction of the County Coroner and disposition is governed by the provisions of Section 5097.94 and 5097.98 of the Public Resources Code. If the remains are Native American, the Coroner is responsible for contacting the Native American Heritage Commission (NAHC). The developer shall comply with all mitigation recommendations of the archaeologist prior to commencing work in the vicinity of the archaeological finds.

This impact would remain potentially significant because if any archaeological remains qualify as historic resources, recordation accompanied by destruction of the resource would not constitute mitigation. (PS)

**Impact HIS-2:** The *Draft SRSP* proposes that the Stanly House be given to any person or organization willing to move the house from the Stanly Ranch and rehabilitate it. In the absence of a party willing to move the house, it would be demolished. Relocation to a location outside the Stanly Ranch or demolition of the house would result in a significant unavoidable impact because it appears to be eligible for the National Register of Historic Places and the California Register of Historical Resources. (S)

As part of the *Draft SRSP*, employee housing is proposed for the vicinity of the historic Stanly House. Retention of the Stanly House has not been proposed as part of the *Draft SRSP*. The demolition of the Stanly House meets the CEQA definition of a "substantial adverse change" impairing the significance of an historic resource, and thus would be equivalent to a significant environmental effect.

Mitigation Measure HIS-2a: The Stanly House shall be rehabilitated and occupied in its historic location, rather than being demolished and replaced with a new building. Rehabilitation of the building would be consistent with *The Secretary of Interior Standards for Rehabilitation and Guidelines for Rehabilitation of Historic Buildings* published by the U.S. Department of Interior (1992). This mitigation measure would reduce the impact to a less-than-significant level.

Mitigation Measure HIS-2b: If Mitigation Measure HIS-2a above is not implemented, the Stanly House shall be moved to a different location on the Stanly Ranch, and the building rehabilitated according to *The Secretary of Interior Standards for Rehabilitation and Guidelines for Rehabilitation of*

Stanly Ranch, and the building rehabilitated according to *The Secretary of Interior Standards for Rehabilitation and Guidelines for Rehabilitation of Historic Buildings*. If the building is moved from its original location, the new location must be appropriate to the historic character of the building. The project sponsor shall guarantee the building will be rehabilitated and occupied, and thus it will not be abandoned and allowed to deteriorate further in its new location. This mitigation measure would reduce project impacts to a less-than-significant level.

The feasibility of moving the Stanly House has not been determined, and is beyond of the scope of this analysis. The feasibility of moving the building can only be determined by a contractor or engineer experienced in moving historic buildings. Although a wood-frame building like the Stanly House can usually be moved without difficulty, the house's structural condition needs to be evaluated to determine if the house can be moved and not significantly damaged.

The following mitigation measures, alone or in combination, would not mitigate this impact to a less-than-significant level. However, they would help to reduce the impact if the Stanly House is not rehabilitated and retained on the Stanly Ranch. If the Stanly House is moved intact from the Stanly Ranch (Mitigation Measure HIS-2c), the salvage activities described in Mitigation Measure HIS-2e would not be necessary.

Mitigation Measure HIS-2c: If Mitigation Measures HIS-2a and HIS-2b are not implemented, the Stanly House shall be moved to a location not on the Stanly Ranch, and the building rehabilitated according to *The Secretary of Interior Standards for Rehabilitation and Guidelines for Rehabilitation of Historic Buildings*. If the building is moved from its original location, the new location must be appropriate to the historic character of the building. The project sponsor shall guarantee the building will be rehabilitated and occupied, and thus it will not be abandoned and allowed to deteriorate further in its new location. Because the Stanly House possesses significant associations with the history of the Stanly Ranch and with John Stanly, a person significant in local history, moving the house to a site off the Stanly Ranch would not reduce project impacts to a less-than-significant level.

Mitigation Measure HIS-2d: Prior to demolishing, salvaging or moving the Stanly House off the Stanly Ranch, the building shall be documented according to the Outline Format described in the *Photographic Specifications* and *The Guidelines for Preparing Written and Descriptive Data: Historic American Building Survey* (HABS) published by the Pacific West Region Office (in San Francisco) of the National Park Service. This documentation

shall include archival quality, large format (minimum 4 by 5 inch) photographs of the exterior and interior of the building. Sketch floor plans shall also be included as part of the HABS documentation. A copy of the documentation, with original photo negatives and prints, shall be donated to an historical archive accessible to the public, such as the Napa County Historical Society, or other suitable local history collection. The HABS documentation of the Stanly House would reduce project impacts, but not to a less-than-significant level.

Mitigation Measure HIS-2e: The preservation of architecturally distinguished or historically significant features of the Stanly House (fireplaces, wall brackets, etc), and the incorporation of these features into the design of a new building proposed for the Stanly Ranch, would reduce project impacts. Salvaging these features in a building not on this parcel (such as in a museum display or in another historic building) would reduce project impacts. However, it would be preferable to have the features preserved in the historic location. If the building is to be demolished, representatives of the Napa County Historical Society, Napa County Landmarks and the Napa Cultural Heritage Commission, and other interested parties shall be contacted and given the opportunity to examine the building and provide suggestions for salvaging these elements in other buildings.

Project impacts would be reduced commensurate with the percentage of the existing building that can be reused or otherwise preserved. The preservation of one or more of the significant interior and exterior features from the existing building as part of a new building would reduce project impacts, but not to a less-than-significant level since the Stanly House would be largely demolished. The preferred alternative from the standpoint of historic values would be to preserve as much of the original building as possible on its historic site.

Mitigation Measure HIS-2f: An exhibit on the history of the Stanly Ranch could be included in one of the new buildings constructed under the *Draft SRSP*. The material assembled for the HABS documentation (see Mitigation Measure HIS-2d) of the Stanly Ranch could be used in such an exhibit. The exhibit shall reduce the project impacts, but not to a less-than-significant level. Combined with Mitigation Measures HIS-2c, HIS-2d, and HIS-2e above, this mitigation measure would further reduce the impacts of the project. (SU or LTS, depending upon mitigation selected. Mitigation Measures 2a or 2b would reduce the impact to LTS.)

**Impact HIS-3:** Of the 2,800 eucalyptus trees along Stanly Lane and Old Suscol Road, about 2,600 trees would be removed and 200 trees retained. (S)



An October, 1997 evaluation of the Stanly Ranch trees by a professional horticulturist recommended that most of the eucalyptus trees be removed because of their poor health and structural condition (McNair & Associates 1997). All the eucalyptus trees on the project site were considered to be in either marginal or poor condition. The report pointed out that an infestation of the eucalyptus longhorned borer, an Australian beetle, during the last three years has seriously damaged and killed many trees on the Stanly Ranch. A Windrow Replacement Plan was prepared in January, 1998 (EDAW, et al.). This plan states that 2,600 of the 2,800 windrow trees along Stanly Lane and Old Suscol Road would be removed. About 200 trees would be retained on Stanly Lane to maintain the visual effect of the windrow. The removal of 2,600 trees along Stanly Lane and Old Suscol Road would have a significant effect on an important "character-defining" feature of these historic resources.

The Windrow Replacement Plan recommends replacing the blue gum eucalyptus, the predominant species on the Stanly Ranch, with native and non-native ornamental trees. Twenty-two different tree species are recommended to be used for replacement of the eucalyptus, none of which are eucalyptus species. The plan recommends varied species are recommended to avoid a monocultural planting susceptible to pest or disease problems in the future, and eucalyptus are not recommended due to their susceptibility to the eucalyptus leaf borer.

Stanly Lane and Old Suscol Road, including their rows of adjacent trees, appear to be eligible for the National Register and California Register under Criteria A and C. The trees are significant, character defining features of the early agricultural development of the Stanly Ranch and as an extant 19th-century rural landscape design of unprecedented scale.

Under the January, 1998 Windrow Replacement Plan proposed for this alternative, 194 eucalyptus trees would be retained along Stanly Lane and all the eucalyptus trees along Old Suscol Road would be removed and replaced with an allee of poplars. The eucalyptus trees retained along Stanly Lane would be on the west side of its northern section and the east side of its southern section, compared to the historic plan of eucalyptus on both sides. The 1,398 new trees to be planted along Stanly Lane would be a mixture of conifers, naturalized and ornamental trees, such as redwoods and poplars.

Mitigation Measure HIS-3a: The blue gum eucalyptus along Stanly Lane and Old Suscol Road shall be replaced with a similar species of eucalyptus. Given that over 600 species of eucalyptus exist, an historical horticulturist shall be consulted to evaluate the feasibility of replacing the blue gum eucalyptus with a similar species of eucalyptus. National Register Bulletin 30 – *Guidelines for Evaluating and Documenting Rural Historic Landscapes* –

recognizes that the issue of the historic integrity of vegetation in an historic landscape “presents a complex problem” (see U.S. Department of Interior 1990:22-23). Since “plants do not remain static but change over time,” *Bulletin 30* indicates that while “original plant material may enhance integrity, *their loss does not necessarily destroy it*” (emphasis added). Consequently, *Bulletin 30* states that if the historic landscape retains “vegetation similar to the historic species in scale, type, and visual effect,” the landscape “can retain integrity of setting.” Although only about 300 trees planted in the 19th century survive, the overall form and feeling of this landscape feature retains integrity because subsequent plantings have maintained the eucalyptus windrows. Consequently, replacing the existing eucalyptus with the same or similar species would retain the historic integrity of this landscape feature. This mitigation measure would reduce project impacts to a less-than-significant level.

The following mitigation measures, which can be adopted alone or in combination, would not reduce the impact to a less-than-significant level but are recommended in the event that Mitigation Measure HIS-3a is not implemented. If any of the mitigation measures below are selected without Mitigation Measure HIS-3a, the impact would remain significant.

Mitigation Measure HIS-3b: The blue gum eucalyptus along Stanly Lane and Old Suscol Road could be replaced with a non-eucalyptus tree species, but a tall, vertical tree with dense, green foliage like the eucalyptus should be selected. A tree species used during the 19th century for windrows would not be appropriate since it would create a false sense of historic development. The *Secretary of Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings* (1995) (hereinafter referred to as The Standards) discourage creating a false sense of historic development in restoring historic buildings and landscapes. In regards to restoring historic landscapes, guidelines discouraging creating a false sense of historic development have been further elaborated in the recently published *Secretary of Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes* (1996). The Proposed CEQA Guidelines (Section 15064.5) indicate that a project consistent with the Standards will mitigate significant impacts. This mitigation measure would reduce project impacts somewhat, but not to a less-than-significant level.

Mitigation Measure HIS-3c: Before large numbers of trees are removed, Stanly Lane and Old Suscol Road shall be photographically documented according to the *National Register Bulletin 30 - Guidelines for Evaluating*

*and Documenting Rural Historic Landscapes and the Photographic Guidelines* for the Historic American Building Survey. The documentation shall include archival quality, large format (minimum 4 by 5 inch) photographs of a variety of views of the two roads. Maps and aerials of the roads shall also be included as part of the documentation. A copy of the documentation, with original photo negatives and prints, shall be donated to an historical archive accessible to the public, such as the Napa County Historical Society, or other suitable local history collection. By itself, the historic documentation of Stanly Lane and Old Suscol Road would not reduce project impacts to a less-than-significant level. Combined with Mitigation Measure HIS-3b, this Mitigation Measure would further reduce the impacts of the project.

Mitigation Measure HIS-3d: The applicant shall include an exhibit on the history of the Stanly Ranch in one of the new buildings constructed on site as referred to in Mitigation Measure HIS-2f. This mitigation measure can be combined with Mitigation Measures HIS-3b and HIS-3c above to further reduce the impacts of the project. (SU-LTS: Depending on the mitigation selected. Mitigation Measure HIS-3a would reduce the impact to LTS.)

**Impact HIS-4:** The project would reuse the cistern as part of a spa proposed for the project. Plans and specifications have not been developed for the spa design and the reuse of the cistern. Assuming the cistern can be preserved intact in its reuse as part of the spa, this aspect of the project would not have a significant effect. If the cistern is demolished or substantially altered as part of building the spa, this aspect of the project would have a significant effect. (S)

As explained earlier, the cistern appears to be eligible for the National Register and California Register under Criterion A because of its significance as a major feature in the design of a large-scale irrigation system for a major Napa County ranch. If the cistern cannot be reused as part of the spa, the following mitigation measures are offered to reduce effects, but not to a less-than-significant level. Moving the cistern would not be feasible given that it is a large, subsurface, concrete structure. The impact would remain potentially significant because the *Draft SRSP* does not definitely include protection of the cistern.

Mitigation Measure HIS-4a: Prior to demolishing or salvaging parts of the cistern, it shall be documented according to the Outline Format described in the Guidelines for the Historic American Building Survey (HABS) published by the Western Regional Office of the National Park Service. This documentation shall include archival quality, large format (minimum 4 by 5 inch) photographs of the exterior and interior of the building. A sketch plan will also be included as part of the HABS documentation. A copy of the



documentation, with original photo negatives and prints, should be donated to an historical archive accessible to the public, like the Napa County Historical Society, or other suitable local history collection.

Mitigation Measure HIS-4b: The applicant shall preserve any features or materials of historic interest in the cistern. Salvaging these features in a building not on the Stanly Ranch (such as in a museum display or in another historic building) would reduce project impacts less than having the features preserved in their historic location. If the cistern is to be demolished, the applicant shall contact representatives of the Napa County Historical Society, Napa County Landmarks and the Napa Cultural Heritage Commission, and other interested parties. The representatives of these groups shall have an opportunity to examine the cistern and provide suggestions for salvaging elements.

Mitigation Measure HIS-4c: The applicant shall include an exhibit on the history of the Stanly Ranch in one of new buildings constructed on site as referred to in Mitigation Measure HIS-2f. This mitigation measure can be combined with Mitigation Measures HIS-4a and HIS-4b above to further reduce the impacts of the project.

The above mitigation measures would reduce project impacts, but any action other than preserving the cistern in its current location would result in a potentially significant impact. Such preservation cannot be guaranteed at this time. (PS)

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## H. VISUAL QUALITY



This section assesses the effects of the proposed project on views of the site from nearby public viewpoints. The analysis considers the visual quality of the site and vicinity, public views of the project site, and relevant policies from the *Draft SRSP Design Guidelines*. Visual simulations are included to graphically depict how the project may appear after construction from selected viewpoints.

<b>1. Setting</b>
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a. Regulatory Setting. Existing General Plan aesthetic goals and policies speak to potential clustering of development on slopes greater than 15 percent or where desirable to protect public scenic areas; encouraging “attractively designed” tourist commercial uses; protecting scenic areas such as prominent ridgelines and hillsides, waterways and other natural resource areas by siting structures to minimize land alteration and vegetation removal; and requiring landscaping of new development (pp. 6-118-9 and 13-7.)

*Draft General Plan* policies state that the City shall recognize aesthetic resources as contributors to the City’s identity; refine gateway locations and establish gateway and scenic corridor design guidelines to ensure attractive entrances to the City, noting that greenways, open space, riparian corridors and wetland areas shall be considered as important components when they exist in gateway locations; designate SR 29 and 12/121 as scenic corridors and endeavor to improve the scenic character of these roads through undergrounding of utilities, increased landscaping, street tree planting and other improvements; and promote an urban form that integrates the urban environment with the City’s natural features.

b. Characteristics of the Site and Vicinity. The project site lies in the southernmost portion of the City of Napa, in a relatively flat valley surrounded by low foothills. Grass-covered hills surrounding the Napa Valley are visible from many areas of the site. Much of this part of the Napa Valley has been cultivated with vineyards. Surrounding uses include grazing areas to the northeast, agricultural uses to the north and west, and the Napa River and Napa Sanitation District (NSD)

treatment facility to the southeast. The heavily-used SR 29/12 crosses through the northern portion of the site.

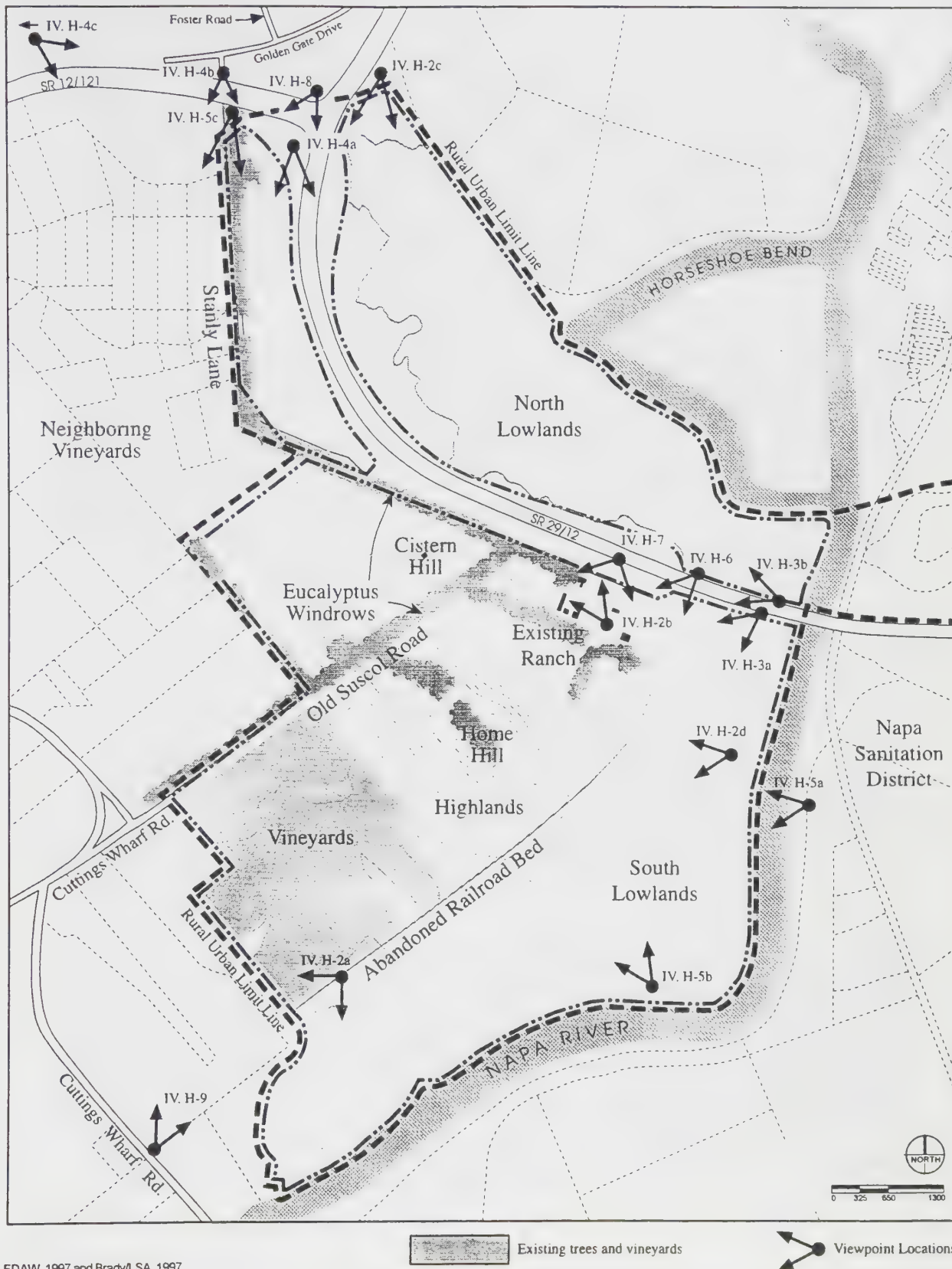
Historically, Stanly Ranch was used for grazing, vineyards, and fruit orchards. Currently, the site is used for grazing and vineyards, which also comprise the agricultural uses at the site's perimeter. The center of the project site is comprised of rolling grass-covered fields intersected by eucalyptus windrows, vineyards, remnant orchards, narrow paved and unpaved roads, and old ranch-related structures, including the ranch building currently occupied by the Stanly Ranch offices. The North Lowlands and South Lowlands, which appear as level areas with low-growing vegetation, make up a significant portion of the eastern and southern parts of the site (see Figures IV.H-1 and IV.H-2). After heavy rains, much of this area is under water.

c. Significant Public Views of the Site. The site is visible from several public viewpoints, including a number of roads and highways, the Highway 29 bridge, Napa Sanitation District's wastewater treatment facility, and the Napa River, as seen in the following photographs. Except for the panorama, which was taken with a 28 millimeter (mm) lens to get the widest view, the photographs used for the visual simulations were taken with a 50 mm lens (which most closely replicates what the eye sees) at a height of 60 inches, typical of a driver's eye height within a sport utility vehicle). Other photographs of existing conditions were taken with a lens with a variable focal length (35 to 105 mm) at a height of 62 inches, typical of a 5-foot, 5-inch tall pedestrian's eye height.

(1) State Route 29 and the North Lowlands. State Route 29/12 passes through the site and separates the North Lowlands from the rest of the site. Most visitors from the Bay Area going to Stanly Ranch would first see the site as they approached it on Highway 29/12 heading northwest, as shown in Figure IV.H-3a. This photo was taken from the Napa River bridge and shows how the median concrete divider and tree tops block the ground level of the near site from view. Figure IV.H-3b shows the same approach but includes the North Lowlands to the right of the freeway. The North Lowlands include a grazed, open space wetlands area adjacent to the Napa River. Driving south on SR 29/12, just south of the 29/12/121 intersection, the panhandle portion of the site is clearly visible (Figure IV.H-4a).

(2) State Route 12. The site is bounded on the north by State Route 12/121 (SR 12/121). As shown in Figure IV.H-4b, the view of Stanly Lane from SR 12/121 at the entrance to the site is dominated by vineyards located at the site's western edge and the eucalyptus windrows that line Stanly Lane. Farther west on SR 12/121, views of the site are largely blocked by existing neighboring vineyards and topography (see Figure IV.H-4c). The majority of the site lies more than 3/4 mile





Source: EDAW, 1997 and Brady/LSA, 1997.

# STANLY RANCH

## SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT

Figure IV.H-1  
Viewpoint Locations

BRADY ■ LSA  
PLANNERS AND LANDSCAPE ARCHITECTS



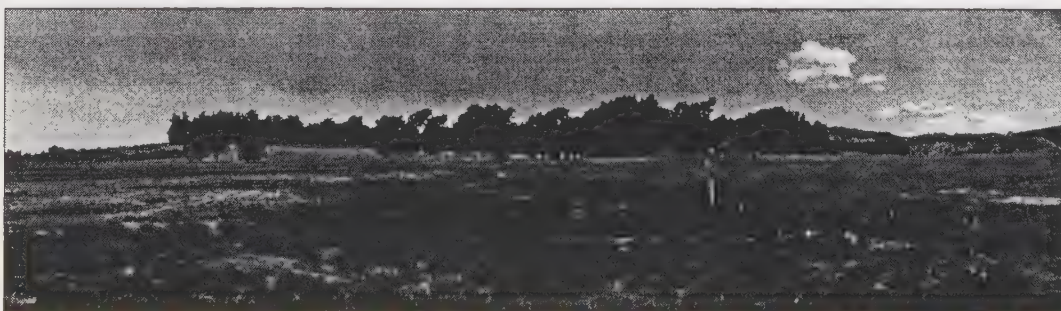
2a. Existing on-site vineyards between Old Suscol Road and the abandoned railroad bed, as seen from within the site.



2b. Original ranch structures and remnant orchards south of Stanly Lane, as seen from within the site.



2c. Looking across North Lowlands from northern edge of the site to eucalyptus windrows along Stanly Lane. Napa River bridge is on far left.



2d. Looking northwest from within the site across the South Lowlands with view of the proposed site of Neighborhood 2 (Home Hill) at the left side of the photograph.

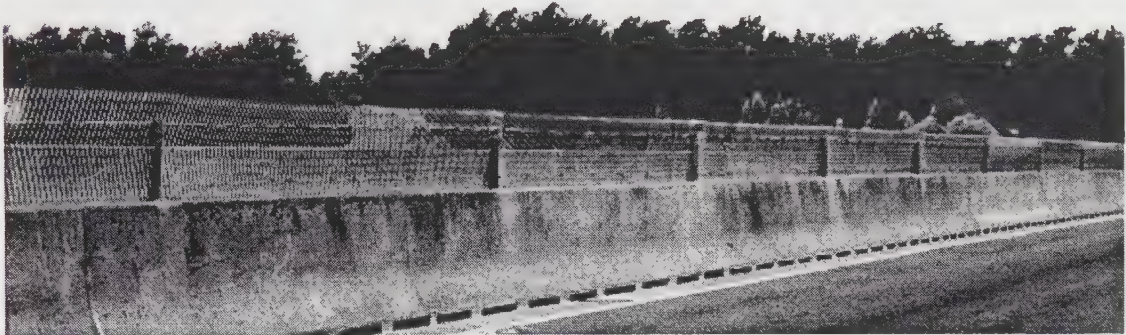
SOURCE: BRADY, LSA 1997

# STANLY RANCH

SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT

Figure IV. H-2  
Photographs of the Site





3a. View southwest towards site from Napa River Bridge from northbound SR 29/12. Photo taken from sport utility vehicle height of 60 inches. Eucalyptus windrows along Stanly Lane form the background of this view.



3b. View of eucalyptus windrows along Stanly Lane (left of freeway) and North Lowlands (right of freeway) from northbound SR 29/12.

Source: Brady/LSA, 1997.

# STANLY RANCH

## SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT

Figure IV.H-3  
Photographs of the Site

BRADY ■ LSA  
PLANNERS AND LANDSCAPE ARCHITECTS





4a. View of Panhandle portion of site from southbound SR 29/12, south of the 29/12/121 intersection



4b. Stanly Lane site entrance at intersection with SR 12/121, looking south.



4c. Long distance view of project site, looking east from SR 12/1212 (beyond vineyards).

Source: Brady/LSA, 1997.

# STANLY RANCH

SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT

Figure IV.H-4  
Photographs of the Site

BRADY ■ LSA  
PLANNERS AND LANDSCAPE ARCHITECTS

south of SR 12. From one of the locations where parts of the site are visible (near the intersection of Cuttings Wharf and SR 12), the site is more than a mile away.

(3) Napa River and NSD Treatment Plant. The Napa River is an important natural feature in the City of Napa and forms the southern and eastern boundaries of the project site. Across the river from the site is the NSD treatment facility. As shown in Figure IV.H-5a, most of the site is blocked from view at this location by existing trees along the levee at the eastern edge of the river. For most boaters using the river, views of the site are blocked by the levee except during high tide or when river water levels are high enough to allow views over the levee. A view northwest towards Home Hill from the levee portion of the site is shown in Figure IV.H-5b. The South Lowlands provide some distance ( $\frac{1}{4}$  to  $\frac{1}{2}$  mile or more) to the proposed residential areas of the site.

(4) Cuttings Wharf Road. Cuttings Wharf Road is a public road which heads south from SR 12, ending at the Napa River at Cuttings Wharf, where there are river facilities, including a restaurant "Moore's Landing". It runs at an angle to the project. From Cuttings Wharf, the site is blocked from view by Moore's Landing and other buildings and vegetation. Views from most other parts of the road are blocked by a combination of vineyards, offsite eucalyptus windrows, topography, rural residential homes and landscaping lining the road, or other buildings. However, there are limited views of the site from about four places along the road, at distances of 0.4 miles or more. One of the most prominent views is shown and discussed below under "Impacts and Mitigation Measures".

(5) Stanly Lane. Stanly Lane is a public road, lined with eucalyptus windrows, as shown in Figure IV.H-5c. These windrows currently enclose the view corridor when driving along Stanly Lane. Although filtered views of the future resort site are visible through the trees, drivers and passengers must turn their heads to see through the trees.

(6) Other. The site is visible from other, longer distance viewpoints, such as the Napa Grape Crusher statue visitor's turnout. However, this view is primarily of the Stanly Lane eucalyptus windrow with the highway overcrossing in the mid-ground, and is similar to the nearer views from Highway 29.

d. Views from the Site. Long-distance views to the hills surrounding the valley are available from many interior portions of the site. In addition to site characteristics described in subsection 1.b above, current views from the center of the site from the proposed Old Suscol Road include vistas of the grassland area southeast of Stanly Lane. Views to the distant hillsides from Old Suscol Road are filtered through eucalyptus windrows.

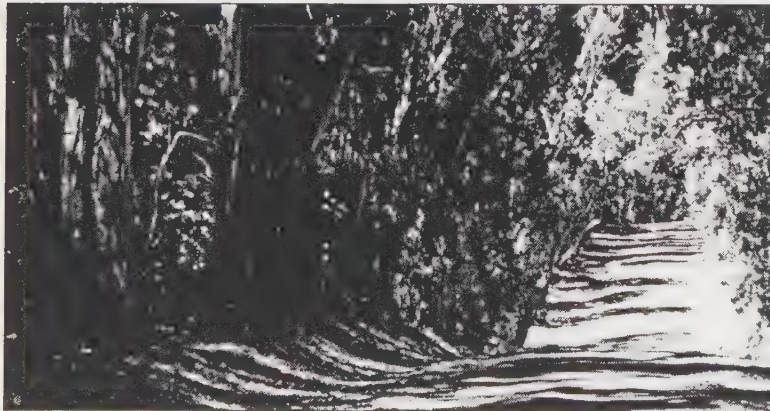




5a. View across Napa River towards the site from the Napa Sanitation District sewage treatment plant.



5b. View northwest towards the site from Napa River levee across the South Lowlands. Home Hill is seen in the center of the view.



5c. Entryway to Stanly Ranch through the eucalyptus windrows along Stanly Lane.

SOURCE: BRADY/LSA 1997.

# STANLY RANCH

SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT

Figure IV. H-5  
Photographs of the Site



## 2. Impacts and Mitigation Measures

a. Criteria of Significance. Potential impacts resulting from a change in the visual setting are often subjective. To some, any development and change to the existing setting, regardless of the design, is considered adverse; others may consider any development to be beneficial. This EIR identifies significance criteria based on Appendix G of the CEQA Guidelines and general urban design principles.

According to the CEQA Guidelines, and using criteria relevant to this project, significant visual impacts would occur if the proposed project:

- Results in substantial inconsistency with the character, scale, massing, bulk, and form of surrounding development;
- Conflicts with the policies of the existing or draft City of Napa *General Plans* relating to visual impacts;
- Results in a substantial, demonstrable negative aesthetic effect, such as obstruction of a scenic vista or the creation of an aesthetically offensive site open to public view; or
- Creates significant light and glare.

Existing eucalyptus windrows along Stanly Lane are an important aesthetic feature of the site visible from many area roads. A primary initial objective of the *Draft SRSP* in the design of Stanly Lane and the project was to minimize loss of the eucalyptus windrows. However, as noted in the Project Description (Chapter III of the EIR), arborist review by both the applicant and the City concluded that these eucalyptus windrows are in rapidly declining health for many reasons, including the recent infestation of the eucalyptus leaf borer. The City's consultant stated that these windrows would be decimated in five to ten years regardless of what happens on the site, and are very hazardous, making them unsuitable for any land use where there is regular use of Stanly Lane (Hagen, 1998).

While it is therefore not possible to minimize tree removal in this case, the applicant has chosen to retain limited numbers of eucalyptus to maintain a windrow effect while newly planted trees are maturing and provide partial screening of the proposed site development areas. The *Draft SRSP* also proposes planting of many new trees to provide new screening and an attractive landscape. Of the 2,799 existing eucalyptus trees located along Stanly Lane and Old Suscol Road, 194 are proposed to be retained, all along Stanly Lane on the west side north of the bend in the road, and on the east side south of the bend. A total of 1,879 new trees would be replanted. Other eucalyptus windrows more interior to the site are also to be removed, except for about 150 trees along the eastern side of Neighborhood One and near the proposed golf clubhouse, which help screen these areas from SR 29.

The applicant-proposed Windrow Replacement and Management Plan (EDAW, Inc., et al., 1998) would begin immediately following tree removal and site preparation. A total of 1,398 trees would be planted along Stanly Lane (in place of 1,606 to be removed) and 501 trees would be planted along Old Suscol Road (in place of all existing 999 trees removed). A mixture of conifers, native and ornamental trees would be planted such as redwoods, cypress, cedar, oaks, California Bay, Lombardy poplar, and other species. The proposed tree species and planting plan are further described in the Windrow Replacement and Management Plan (EDAW, Inc., et al., 1998). A brief summary of the planting plan follows:

The Windrow Replacement and Management Plan states that along Stanly Lane, "the proposed planting plan uses coastal redwoods for height and screening; various native trees for foliage mass, and large agrarian groups of plants to form the large scale landscape spaces now present on the site." Along Old Suscol Road, "The proposed double allee of columnar trees...signals the entrance to the resort area and is designed to flank the road and the...Bay Trail which parallels it. The allee would recall typical farm road plantings and be complimented with...[native trees]." "The Lombardy Poplar...is the preferred choice for this planting." To mark the Stanly Lane entrance, an orchard would be planted on the east side of the road and integrated into the proposed wine center parking lot. The "naturalized" or native trees element of the planting plan would be located on both sides of the middle portion of Stanly Lane, and on alternating sides of the upper and lower portions of Stanly Lane where eucalyptus are not retained. This planting would include informal clusters of mostly native trees in layouts which resemble the natural configurations of oak woodland or savannah and small coastal redwood groves. It is the design intent to further integrate this planting throughout wide areas of the development site plan.

Because of the results of a certified arborist's study of the health of the eucalyptus trees on site, most of the eucalyptus trees are proposed to be removed, which would significantly alter views of the site from public locations. A replanting plan for the site has been prepared (EDAW, Inc., et al., 1998) and was used in the preparation of visual simulations, showing how the project would appear five years after construction. Different images have been used in the simulations to represent coniferous trees, eucalyptus, naturalized deciduous trees, naturalized evergreen trees, columnar ornamental trees, ornamental globular trees, and grape vines.

b. Less-Than-Significant Impacts. The following impacts have been determined to be less than significant.

***Impact VIS-A: Implementation of the proposed project could adversely affect views from some public locations along Cuttings Wharf Road. However, this impact would be less than significant for the following reasons: proposed***

***structures are low rise, these views would be at a distance of approximately one-half mile or more, and views of new development would be partially screened by intervening vineyards and required agricultural buffer plantings. (LTS)***

Along most of Cuttings Wharf Road, views of the project site are minimal. Screening of views occurs due to the following combination of factors: adjacent vineyards; topography; off-site eucalyptus windrows; and homes or other buildings and landscaping along the road. The site is visible in about four places at distances of 0.4 miles or more. Figure IV.H-6b is taken from one of the most visible locations, north of Cuttings Wharf and several homes at an old railroad alignment. Visual impacts from this location would be limited for the following reasons: the low-rise aspect of the structures proposed for the Stanly Ranch project; required agricultural screening; distance; and proposed project quality. Figure IV.H-6b demonstrates that with removal of many of the existing eucalyptus trees, distant views to the hills would increase in some locations at least in the short term. The impact of the project on views from Cuttings Wharf Road would therefore be less than significant. The impact of the change from agriculture to urban uses is described in Impact VIS-1.

Condition of Approval VIS-A: None necessary. (LTS)

***Impact VIS-B: Implementation of the proposed project could adversely affect views from some public locations from the Napa Sanitation District (NSD) treatment plant or along the Napa River. (LTS)***

From the NSD road, proposed Stanly Ranch structures would be largely screened by existing vegetation along the levee, and impacts would be diminished given the intervening open lands and distance of proposed structures (0.25 to 0.5 miles or more) from the edge of the site. Also, the NSD treatment plant, while public, is not a high public use area. Similarly, because of the low-rise nature of the proposed project structures, the levee embankment would block views from most boats on the Napa River except during high tides and times of the year when water levels of the Napa River are high enough to allow views over the levees. Distance and proposed project quality would result in less-than-significant visual impacts. (The impact of the change from agriculture to urban uses is described in VIS-1.)

Condition of Approval VIS-B: None necessary. (LTS)

***Impact VIS-C: Implementation of the proposed project would change views of the site from some proposed public locations along the proposed Bay Trail and River Trail alignments on the project site. Visual impacts along the Bay and River Trails would be less-than-significant. (LTS)***



No public trails currently exist on the site. However, a portion of the Bay Trail is proposed to run from Cuttings Wharf Road to and along proposed Old Suscol Road, to Stanly Lane, then north along Stanly Lane (see Figure III-16). The River Trail would connect to the Bay Trail at Stanly Lane, heading south to a destination point at the levee of the Napa River to two Northerly Loops. A Future Southerly Loop is also planned (see Chapter III, Project Description and Figure III-16). These trails would also serve as important new public viewpoints of the site.

As public trail views of the site only occur as a result of the project, visual impacts of the project from the trail would be less-than-significant. However, *Draft SRSP Design Guidelines* are intended to provide for extensive landscaping and an attractive project through which to ride or walk. Views from the proposed Bay Trail would include views of the entire proposed project – its resort area, residential neighborhoods, the golf course and driving range, the winery and wine center, protected open lands and adjacent agricultural areas and roads. Views from the proposed River Trail would provide views of the southern parts of the proposed project, including the golf maintenance yard, parking lot, Environmental Interpretive Center and its protected Lowlands, the levee, and Napa River. The River Trail Northerly Loops would also provide extensive views of surrounding lands: agricultural areas, the NSD facilities, SR 29, the Napa Corporate Park, and eastern hills beyond the project site.

While the *Draft SRSP Design Guidelines* address project and parking lot landscaping, they do not specifically address the golf maintenance facility. To assure that the golf maintenance facility is attractive from the proposed River Trail, a condition of approval is recommended to require fence and landscape screening of the facility.

Condition of Approval VIS-C: Final design plans for the golf maintenance facility shall identify fencing and landscape screening from the proposed River Trail. (LTS)

***Impact VIS-D: Unshaded lighting fixtures could create additional light and glare. Given proposals regarding lighting in the Design Guidelines of the Draft SRSP, this impact would be less than significant. (LTS)***

Increased lighting would occur at the project site in association with new residential and commercial development. Lighting of outdoor areas such as maintenance facilities and parking lots and streets would also occur. The *Draft SRSP Design Guidelines* also mention uplighting for specific site features such as plantings at the edge of walls, sculptures, and signage. The *Draft SRSP Design Guidelines* state that lighting shall be used only in areas of pedestrian activity and key vehicular traffic areas such as intersections and illumination of curves in roadways. Indirect lighting





6a. Existing view looking east from Cuttings Wharf Road.



6b. Proposed development looking east from Cuttings Wharf Road.





would not be installed where its direct light source is visible from neighboring properties, or where it produces excessive glare to vehicular traffic. Lighting of signs would be kept to a minimum (EDAW, 1997). If these specifications of the *Design Guidelines* are followed, no additional mitigation would be necessary. The City also has standard conditions of approval which require light shielding.

Condition of Approval VIS-D1: Mitigation Measure VIS-4 shall be implemented to ensure that the proposed lighting plans are consistent with the Design Guidelines of the *Draft SRSP*.

Condition of Approval VIS-D2: All new lighting shall be shielded to avoid glare and directed onto the project site and accessways.

Condition of Approval VIS-D3: Low-level lighting shall be utilized in any parking areas as opposed to elevated high-intensity light standards. (LTS)

c. Significant Impacts and Impacts on Public Views. As stated in the setting section, public views to and from the site occur from five main locations: (1) SR 29/12; (2) SR12/121; (3) the Napa River and NSD Treatment Plant; (4) Cuttings Wharf Road; and (5) Stanly Lane. The following section describes the visual effects of the proposed project on views to and from the site, as well as project consistency with policies relating to visual impacts. Potentially significant impacts are described below.

**Impact VIS-1: The size and location of the proposed Stanly Ranch development would result in a major change in visual character in an area of agricultural, open space, and rural residential uses. The project has the potential to be inconsistent with the character, scale, massing, bulk, and form of surrounding development and would result in a significant impact. (S)**

The project proposes to create a "...country estate resort atmosphere in an agrarian landscape context" (EDAW, 1997). Development is low scale with substantial open lands and landscaping. However, little development surrounds the project site, as discussed in Section IV.A of the EIR. Agricultural uses, very low density residential uses, and the Napa River surround the site. Despite the *Draft SRSP's Design Guidelines* emphasizing a low-rise, clustered resort and residential development (with significant landscaping), the project would result in an urban level of development within a portion of the City that is currently rural. Essentially any urban development at the site would be inconsistent with the existing visual character and scale of the surroundings. The area would provide urban level lighting at night in what is currently a largely unlighted area, changing the rural visual character. This impact cannot be mitigated to a less-than-significant level without

major changes to the project that would not meet any of the applicant's objectives for the project.

**Mitigation Measure VIS-1:** This impact would remain significant and unavoidable. However, it is noted that many of the following visual mitigation measures would reduce the effects of this impact. (SU)

**Impact VIS-2:** The project could conflict with visual-related policies of the City's adopted *General Plan* and *Draft General Plan*. (S)

The adopted *General Plan* includes the following policies relative to visual impacts:

- Land Use Policy B9: Clustering of units and/or a reduction in density may be required when developing in the following areas: On slopes of 15 percent or greater; On lands adjacent to streams and marshes...; in other areas where desirable to protect general public scenic areas or view corridors...
- Land Use Policy C6: Attractively designed tourist commercial use shall be encouraged...along Highway 29.
- Land Use Policy C9: Commercial Development shall be designed and adverse impacts mitigated to protect the quality of surrounding residential areas...
- Open Space Policy C2: Scenic areas such as prominent ridgelines and hillsides...and other natural resource areas shall be protected as open space whenever possible by siting structures to minimize land alteration and vegetation removal...

The Public Policy section (Section IV.B of EIR) concluded that the proposed project is consistent with the Policies C6 and C9. It found that while Policy B9 is not *mandatory* and therefore consistency is not an issue, the policy identifies when clustering or density reduction should be considered. The last policy is identified as one with which the project is potentially inconsistent. With the loss of most of the site's eucalyptus, Home Hill becomes a relatively prominent ridgeline when viewed from SR 29, a main entrance to the Napa Valley. (The ridgeline also has some prominence from Cuttings Wharf Road; however, views are more distant.) This potential impact is described in more detail under Impact VIS-3. Development on Home Hill (Neighborhood 2) also occurs in a small area where hillside slopes exceed 15 percent.

*Draft General Plan* Policy LU1.6 designates SR 29 and SR 12/121 as scenic corridors, and states that the City will endeavor to improve the scenic character of these roads through undergrounding of utilities, increased landscaping, street tree planting and other improvements. Utility undergrounding, landscaping and street tree planting are all proposed as part of the project. The *Draft General Plan* Policy

1.5 states that the City will establish gateway and scenic corridor guidelines, and in gateway locations, greenways, open space, riparian corridors and wetland areas shall be considered as important components. It is noted that guidelines have not yet been established. *Draft General Plan* Policy 1.4 also states that the City shall recognize aesthetic resources as contributors to the City's identity and Policy 9.1 speaks to promoting an urban form that integrates the urban environment with the City's natural features. These policies strive to assure attractive projects which integrate with site natural features, particularly in prominent locations along scenic corridors and gateways to Napa.

**Mitigation Measure VIS-2:** To bring the project into consistency with existing General Plan Open Space Policy C2, the applicant shall implement Mitigation Measure POL-1h which requires elimination of the easternmost six townhomes and the proposed easternmost row of homes on Home Hill (Neighborhood 2) from the northern subdivision edge to the second cul-de-sac/circle, and replanting of this area with a new tree grove comprised of native and ornamental species of sufficient height and width to screen two-story homes within five years of planting. (LTS)

**Impact VIS-3:** Implementation of the proposed project could adversely affect views of the site from SR 29/12 and SR 12/121 which are proposed as scenic corridors in the *Draft General Plan*. The project's reduced screening along a proposed scenic corridor could result in a significant visual impact until replanted trees called for in the Windrow Replanting Plan are large enough to begin to replace the "greenway corridor" and screening provided by the existing eucalyptus. After five to ten years, screening should be adequate and the impact would be less-than-significant. The tree replanting plan would be expected to provide an attractive landscape over the longer term along the highway corridor. (S: Short Term) (LTS: Long Term)

Northbound on SR 29, eucalyptus trees and the highway median currently screen most of the future resort and residential portions of the project site from the view at the Napa River bridge, as shown in Figure IV.H-7a. The eucalyptus are also an important feature along the corridor. While the median would continue to partially screen proposed development from view, the simulation shown in Figure IV.H-7b demonstrates that, with the loss of eucalyptus trees anticipated regardless of the proposed project, several areas of development would become visible from this viewpoint location. Elements of the project visible from the SR 29 would include the Neighborhood 1 and Home Hill (Neighborhood 2) residences, and small portions of the resort.

Heading southbound on SR 29, two views are shown. In the southernmost panoramic simulation shown in Figure IV.H-8b, the golf maintenance yard,



employee housing and homes in Neighborhoods 1 and 2 would be visible, although partially screened by existing and proposed vegetation. As with viewpoint IV.H-6, a significant number of eucalyptus trees would no longer be visible from SR 29. Figure IV.H-8b shows proposed development with vegetation after five years of growth. Trees in the foreground are in the SR 29 right-of-way. Homes in Neighborhood 1 are about 900-1,000 feet away from the nearest travel lanes.

For motorists traveling southbound along SR 29/12, the driver would have to turn almost 90 degrees from the direction of travel to see the view shown in Figure IV.H-8. Because high speeds and safety considerations at this approach to the SR 29 bridge limit the angle and duration of this view, the project's impact on this view from southbound lanes would be diminished.

Further north, at SR 29's intersection with SR 12/121, the proposed wine center and winery would be highly visible in the midground, with proposed vineyards in the foreground (Figure IV.H-9). Many eucalyptus in the background would be removed and remaining trees would be topped; however, the eucalyptus would remain a major visual element from this viewpoint. The proposed location, height, bulk, and colors of the proposed wine center and winery would be in keeping with the surrounding agricultural and winery-related land uses.

No visual simulation was provided for southbound SR 29 views between the SR 12/29 intersection and the more open view near the SR 29 bridge, as eucalyptus along Stanly Lane currently screen most views to the west. With loss of most of the eucalyptus, remaining eucalyptus screening would be less effective and it is likely that some of the resort buildings would become noticeable in the short term, until new trees grow. Many groupings and rows of trees are proposed to be planted along or adjacent to Stanly Lane.

Mitigation Measure VIS-3a: To provide screening of Home Hill residences from northbound SR 29, the applicant shall implement Mitigation Measure VIS-2.

Mitigation Measure VIS-3b: To recreate the scenic "greenway" corridor along SR 29 and provide screening of the site, the *Draft SRSP* shall be revised prior to adoption to incorporate the proposed Windrow Replacement and Management Plan (EDAW Inc., et al., 1998) and the applicant shall implement tree plantings as early as possible in Phase 1 of the project.

Mitigation Measure VIS-3c: Additional tree plantings shall be added southeast of the golf clubhouse, resort lodge, nearest guest cottages to the east, and spa to provide long-term screening of these buildings from view from SR 29/12. New trees shall also be added at the northeast end of



7a. Existing view from northbound SR 29.



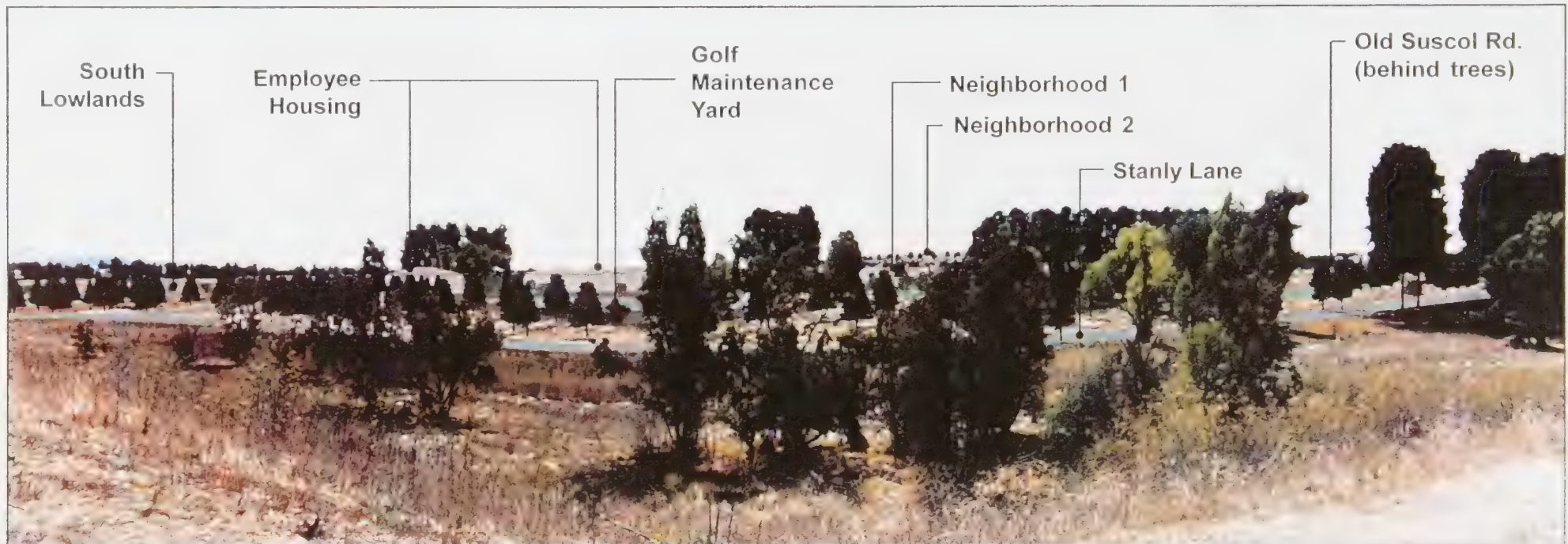
7b. View of proposed development from SR 29.







8a. Existing view from SR 29.



8b. Panoramic view of proposed development from SR 29.







9a. Existing view looking south from SR 12/29/121 interchange.



9b. View of Panhandle from SR 12/29/121 interchange.





Neighborhood 1 to better screen it from view for northbound motorists on SR 29/12. Plantings shall be consistent with those recommended in the replanting plan for these locations.

Mitigation Measure VIS-3d: The applicant shall secure an encroachment permit from Caltrans and, as soon as possible following approval of the *Draft SRSP*, plant additional trees within the wide Caltrans right-of-way in the areas described below to maximize screening of proposed resort and residential areas from the view of southbound motorists. Tree plantings close to the travel lanes would be particularly helpful south of the central swale in screening the employee housing area and golf maintenance yard, and to better screen homes in Neighborhood 1. North of the central swale, added trees planted east of the retained eucalyptus would add to the screening of the resort area.

Mitigation Measure VIS-3e: Final design plans for the winery and wine center shall: 1) include additional tree plantings on the north and east sides of the wine center and winery; and 2) provide equal attention to design of all facades to provide an exceptional design.

Mitigation Measure VIS-3f: Prior to adoption, the *Draft SRSP* shall be revised to include specific measures regarding design review as described in Mitigation Measure VIS-4.

Mitigation Measure VIS-3g: All new utilities proposed as a result of the proposed project shall be undergrounded. (SU: Short Term) (LTS: Longer Term [after 5-10 years])

**Impact VIS-4: The proposed project could result in significant visual impacts if not subject to appropriate design review and if the *Draft SRSP Design Guidelines* are not properly implemented. (S)**

Unless alternate procedures are incorporated in an adopted Specific Plan, under the City's Specific Plan (SP) Zoning procedures the only design review required for the project would be approval of a site development plan by the Planning Director prior to issuance of building permits. Procedural elements regarding design review are not addressed in the *Draft SRSP Design Guidelines*.

To assure consistency with local surroundings and to implement *Draft SRSP* design objectives over time, the *Draft SRSP Design Guidelines* specify implementing the following objectives:

- Guest cottages will be detached from the main lodge as proposed and accessible by foot and electric cart only. Both guest cottages and resort home

buildings will be clustered and built for a low profile within existing landform.

- Important on-site view corridors will be identified and maintained.
- A simple, refined material palette in a residential scale of construction will be used compatible with the main lodge and clubhouse.
- The main lodge and golf clubhouse in the resort area will be three stories in height, and the guest cottages will be one- and two-story units. The wine center and winery will be low-rise buildings of one-to two-stories.
- The residential neighborhoods will be designed in a small scale appropriate to residential structures. The employee housing units will be two-story apartment flats.

The *Design Guidelines* specify use of materials that would create a rural atmosphere in the resort, commercial, and residential areas. To ensure that these specifications of the *Design Guidelines* are followed, the following mitigation measure is recommended:

Mitigation Measure VIS-4: The City shall ensure that the *Design Guidelines* of the *Draft SRSP* and visual mitigation measures or conditions of approval are implemented prior to the issuance of building permits. To ensure compliance given the sensitivity of this project, the Planning Commission shall be responsible for design review prior to issuance of building permits for major project components: the highly visible winery and wine center, the resort lodge, golf clubhouse, golf maintenance facility and major parking lots, initial residential subdivisions and initial resort unit designs, and the employee housing complex. The applicant shall secure separate architectural review approval for any signage for the project. (LTS)



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## I. POPULATION, EMPLOYMENT, AND HOUSING



This section examines the significant employment, housing, and demographic issues associated with implementation of the proposed project. Specific issues associated with the project and discussed in this section include:

- Need for and availability of affordable and employee housing in the context of City regulations and programs.
- Jobs/housing “balance” related to the project.

<b>1. Setting</b>
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a. Population. Like most cities in the greater San Francisco Bay Area, Napa has experienced continuous growth for the past few decades. However, because of the area's relative isolation in the region's northern fringe and City and County policies, growth in Napa County has been slower than many other parts of the Bay Area (City of Napa, 1996a). From 1980 to 1990, Napa County's growth rate of 11 percent, or 1.1 percent per year ranked second only to Marin County as the lowest in the Bay Area. The City and County of Napa have formally cooperated since the 1980s to ensure that urban development occurs in designated urban areas. From 1980 to 1990, the City's population and its unincorporated environs (RUL) increased about 1.7 percent per year, reflecting in part the concentration of new development in urbanized areas (ABAG, 1995). From 1990 to 1995, the City/RUL population grew from 67,561 to 72,000, or 1.3 percent per year.(ABAG, 1997). The City/RUL population is projected to increase at an even slower rate between 1995 and 2010. Recent regional projections are for the City/RUL to increase another 9,500 persons, or 0.9 percent per year during that time frame, similar to the County's 1 percent per year projected growth rate (ABAG, 1997). Total County population from 1995-2010 is projected to increase by 18,500 persons.

b. Jobs. Napa County is the center of the grape-growing and wine-processing industry in the Bay Area. Tourism is also an important part of the County's economic base. Jobs associated with tourism are in the retail and service categories. Between 1980 and 1990, the County economy added more than 11,900 jobs, and from 1990-1995, another 2,290 jobs were added despite several recession years. From 1995 to 2010, 22,510 new jobs are projected countywide, numerically

outstripping projected housing and even population growth (ABAG, 1997). Of these jobs, 41 percent, or 9,160, are projected to occur in the City of Napa and its RUL, while 5,340 would occur in the County Airport Industrial Area and 3,720 in American Canyon.

c. Housing. This subsection describes housing stock in the City and County of Napa, existing and projected housing demand, and local affordable housing regulations.

(1) Existing Housing Stock. Napa has long been an autonomous city with a variety of housing types. Historically, the City has provided much of the County's total housing at all income levels. In 1990, there were 44,199 total housing units in Napa County and 24,922 units in the City of Napa (U.S. Census, 1990a). In the City, 15,330 units were single-family detached and 1,710 were single-family attached (68 percent), 6,187 were multiple family (25 percent), and 1,695 were mobile homes (7 percent). This compares to 69 percent single-family, 11 percent multiple family and 18 percent mobile homes in the unincorporated County (City of Napa, 1996; Napa County, 1992). In terms of home values in 1990, Napa County as a whole had a higher median home value (\$182,600) than the \$174,100 median home value of the City (U.S. Census, 1990b).

Regional projections are that the County will add 7,860 households between 1995 and 2010, and that 4,410 households will occur within the City and its RUL (ABAG, 1998). The official 1996-97 vacancy rate was 4.04 percent (California Department of Finance, 1997), which means a relatively tight market per City Code 17.96.020.

As elsewhere in the Bay Area, housing affordability is a problem for many households. As of 1995, only 25 percent of Napa's families earned incomes at or above the required level to qualify and purchase an average price home in the City. Renter households are twice as likely to have a housing problem (52 percent), and the problem is most critical for low and very low income renters (70-75 percent) (City of Napa, 1997).

(2) Housing Element and Fair Share Housing. The Housing Element of the *City of Napa General Plan* (City of Napa, 1991) has a time frame that extends through 1999, and was not required to be updated as part of the ongoing comprehensive *General Plan* update. The first goal of the Housing Element is to attempt to meet ABAG-stated housing needs figures for the state-mandated time frame of the Housing Element period, which include 893 very-low income units, 607 low-income units, 750 moderate income units, and 1,321 above-moderate-income units (City of Napa, 1991). The current 1991 certified Housing Element indicates that Napa has sufficient land to accommodate projected housing needs (City of Napa, 1996a).

The State Department of Finance estimated that 2,055 new housing units were constructed in the City of Napa between 1990 and 1997. Of this total, 1,438 units were single-family detached, 92 units were single-family attached, 483 units were multi-family and 42 units were mobile homes. These new units included 357 units affordable to very low and low income households, with another 39 units fully financed and ready for building permits for very low and low income households (26 percent of need)<sup>1</sup>, an estimated 110 affordable to moderate income households (15 percent of need) and the remainder affordable to above-moderate income households (Hasser, 1997). As a result, the City has a shortfall of 1,104 very-low and low-income units and 640 moderate income units. During the 1990-99 time frame, the City has met its short term need for above-moderate income units, but, like nearly all cities in California, was unable to meet all needs for low and moderate income households. The City is not required to meet all needs. Rather, the main obligation in State law is that each city must designate sufficient land for relatively high-density development to permit, if the necessary funding materializes, construction of enough housing units for very low, low and moderate income persons to meet the city's "fair share" of such units, as set by the Association of Bay Area Governments. The California Department of Housing and Community Development has certified the City of Napa's Housing Element, adopted in 1991, as meeting those requirements. Additionally, the City Housing Authority has many active programs which assist in construction of housing affordable to very low, low and moderate income households.

Housing Element policies which help to implement the above housing goal applicable to the proposed project include the following (City of Napa, 1991):

- *The City shall use the Planned Development regulations to refine land use policies and promote design flexibility for residential developments, particularly for those located in unique settings (Policy H-1.6).*
- *The City shall, to the degree feasible, balance employment opportunities with the provision of housing and promote housing types which meet the needs of the workforce in Napa (Policy H-1.10).*

d. Jobs/Housing Balance. "Jobs/housing balance" is a concept that refers to the numerical relationship between the number of jobs and housing units within any given community. The issue involves environmental impacts only to the extent that issues such as air quality, traffic, and land use are implicated. The relationship between jobs and housing became a concern in the Bay Area by the early 1980s when high technology jobs in the Silicon Valley went through a period of rapid growth, and far exceeded population growth, especially in Santa Clara County.

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<sup>1</sup> A breakdown of very-low income versus low-income was not provided. Therefore, these two groups are examined together in this analysis.



A *region* that has too many jobs relative to its housing supply is likely to experience rapid escalation in housing prices (with a concurrent decline in affordability for the lower-income segments of the community), and intensified pressure for additional residential development. Conversely, if a *region* has relatively few jobs in comparison to employed residents, many of the workers are commuting to jobs located elsewhere. The resulting traffic patterns can lead to road congestion and reductions in both local and regional air quality.

Although the term “jobs/housing balance” is still occasionally used, a more precise relationship is between jobs and the number of employed residents. The primary reason is that some households have no workers, while others have multiple workers.

From 1980 to 1990, the City of Napa’s jobs to employed residents ratio stayed at 0.83, but countywide, the ratio increased from 0.83 to 0.90. With this increase, the County of Napa was approaching a 1.0 ratio which means there is a local job for every employed resident. This change in the jobs to employed residents ratio indicate that jobs were increasing at a faster pace countywide than either the residential units or the number of employed residents between 1980 and 1990. By 2010, the City’s jobs/employed residents ratio is projected to increase to 0.90. Countywide, with significant jobs growth projected, the jobs/employed residents ratio is projected to increase to 1.10. (By comparison in 1995, the jobs/employed residents ratio in Santa Clara County was 1.02.)

It is clear that even if communities have a statistical balance between jobs and housing, sizeable levels of in-commuting and out-commuting can still occur, given the existence of other employment opportunities within the region, a highly mobile workforce, price of housing and types and salaries of jobs available. Given all these factors, the chief statistician at ABAG states there is no ratio that is considered “good” or “bad” and no policy to aim towards (Fassinger/Amaroso, 1998). The City also has no specific standards regarding such ratios. The jobs/employed residents ratio is primarily one indicator of whether a community or area is becoming a net importer or net exporter of jobs. The jobs/employed residents ratio coupled with increases in in-commuting projected by the County CMA, appears to indicate the County is becoming a net importer of workers. This information is useful when considering general city policies to “balance” employment opportunities with housing.

## **2. Impacts and Mitigation Measures**

- a. Criteria of Significance. For this EIR, remembering the environmental concerns are mainly air quality and traffic, the proposed project would have a significant impact on population, employment, and housing if it would:

- Result in substantial, unanticipated population or housing growth;
- Cumulatively exceed official regional or local population projections;
- Displace a large number of people;
- Displace existing housing, especially affordable housing.
- Conflict with existing City housing policies;
- Hinder the accomplishment of projected "fair share" housing needs.

b. Less Than Significant Impacts. This section outlines project population, housing and employment impacts. None exceed the criteria of significance set forth above.

The proposed project would add 540 market rate residences and 54 employee housing apartments, a 2 percent increase in the City's current housing stock. Using the 1990 U.S. Census figure of 2.55 persons per household in the City of Napa, the population of Napa would increase by approximately 1,515 people or an added 2.1 percent to the City's 1995 population over a period of about ten years. This increase was included in *Draft General Plan* projections.

In terms of acreage, the 918-acre project site comprises about 1/15th of the area of the City. The Stanly Ranch planning area is the largest single area of vacant land remaining within the City's Rural-Urban Limit Line (RUL). Because the City's adopted *General Plan* identifies this site as "appropriate for urban development", because the proposed project results in a small projected increase in overall City population, and the fact that it has been included in the 1996 *Draft General Plan*'s 600-unit projections which were supplied to the regional agency, the project would not result in substantial, unanticipated population or housing growth or cumulatively exceed any local or regional population projections.<sup>2</sup>

**Table IV.I-1  
EMPLOYMENT ASSOCIATED WITH  
PROPOSED LAND USES**

Area	Subarea	Estimated Number of Employees
Resort	Main Lodge	50
	Restaurant	5
	Retail	150
	Conference Facility/Support	
	Spa	65
	Golf Clubhouse	24
	Restaurant	6
	Golf Shop and Misc.Support	
	Maintenance	50
Panhandle	Wine Center	75
	Winery	75
<b>Total</b>		<b>500</b>

<sup>2</sup> Refer to "Reader Note" on page IV.B-7 of Section IV.B regarding the most recent recommended designation for the project site.

The proposed project would result in the displacement of the current ranch foreman, a permanent resident, and two seasonal farm workers who currently live at Stanly Ranch. Because the proposed project would replace fewer than five units of existing affordable housing on-site with 54 units of affordable housing, implementation of the proposed project would not cause a net displacement of affordable housing, or displace a large number of people.

Other less-than-significant impacts include whether the project would conflict with City housing policies or hinder the accomplishment of "fair share" needs.

The project would provide 350 new jobs at the resort and another 150 new jobs at the winery and wine center. Along with this, the *Draft SRSP* proposes construction of 540 new market rate units and up to 54 new employee units. The discussions with City Housing Authority staff concluded that these units would be required to be affordable to very low and low income households.

Given the continuing Countywide trend of job growth exceeding housing and population growth, the inclusion of new housing on the site would provide added opportunities for employees to live and work in the local area.

Additionally, while there are no City requirements for large employers to provide low cost housing, this project has taken the unusual step of assuring that at least some percentage of its workforce would be housed on the site, which has air quality and traffic benefits.

***Impact POP-A: Along with City subsidized housing programs, the project's employee housing proposal assists the City in meeting its "fair share" housing goals for low and lower-income workers. To assure that this occurs, the following Conditions of Approval are recommended. (LTS)***

Condition of Approval POP-A1: Prior to issuance of the first grading permit or other early approval as determined in the Development Agreement, the applicant shall enter into an agreement with the City to supply 54 employee rental units affordable to very low and lower income households (<50 percent of median income). The agreement shall include rent levels and ensure their continuing affordability over time. The applicant and/or property owner shall provide the City with a yearly accounting of the total affordable units occupied, the total units vacant, and the number of requests made by on-site employees desiring on-site affordable units.

Condition of Approval POP-A2: The City shall ensure that the employee housing is built in the first phase and at the same time as the resort area, wine center and winery are built. (LTS)



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## J. PUBLIC SERVICES

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This section describes and evaluates the public services setting, impacts, and mitigation measures for the proposed project, including public safety, schools, parks and recreation, and solid waste services. As part of this analysis, individual service providers were contacted and provided with a written description and maps of the proposed project.

*Regulatory Setting.* Existing *General Plan* policies dealing with public services state that a full range of community related services shall be provided within the City; that adequate water supply shall be maintained for fire protection; that fire protection requirements shall be strengthened for new construction with emphasis on construction beyond planned fire response radii; that fire hazards shall be mitigated where appropriate by proper siting, use of fire resistive materials, etc; and that parks and recreation standards shall be met as further described in the parks and recreation section.

*Draft General Plan* policies state that the City shall ensure that adequate public facilities and services and personnel are available to serve new development, and shall require to the extent legally possible, that new development pay the cost of providing new public facilities and services; that the City shall endeavor to maintain a police and fire/medical emergency force to sustain five-minute response times; that private roads shall be designed to allow for emergency access; that adequate fire flows shall be met; and that the City shall continue to require sprinklers and Class B roofing and fire resistant building materials.

<b>1. Public Safety</b>
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a. Setting.

(1) Police Services. The Napa Police Department (NPD) provides police services to Stanly Ranch. The Police Department headquarters are located in downtown Napa on First Street, approximately three miles from the project site. The current authorized staff of the Patrol Bureau consists of one commander, seven sergeants, 40 police officers and seven community services officers. Assuming an

estimated citywide resident population of about 67,000, the sworn officer-to-population ratio is approximately 1.1 per thousand residents. In addition to police protection services, Napa police officers are involved in several community-related programs, including neighborhood watch and the Drug Abuse Resistance Education Program at nineteen local schools. Funding for the Napa Police Department is provided by the City of Napa General Fund, with occasional supplements from grants (Monez, 1997).

Napa Central Dispatch operates 24 hours a day, handling calls for the NPD, Napa County Sheriff's Office, City Fire, and local ambulance companies. In 1996, Napa Central Dispatch received over 100,000 calls for service, over 60,000 of which were for the Police Department. All calls to the Police Department are assigned a priority, from one to nine, depending on urgency. Officers receive calls as they patrol their beat. Response times depend on the type of call and the location of the officer(s) when the call is dispatched. In 1996, average response time for priority one calls from the time of receipt in the Dispatch Center to the time the first officer arrived on the scene was less than four minutes. Response time for lower priority calls averaged as much as 47 minutes (Monez, 1997).

The California Highway Patrol and the Napa County Sheriff's Department provide law enforcement to the unincorporated areas of Napa County, which include the properties and highways directly adjacent to Stanly Ranch. Although an officer from one of these agencies might be closer to the site at the time of a call, they would not respond unless it was an emergency or if they were specifically requested to do so by the Police Department.

(2) Fire Safety. The discussion below of the existing setting for fire safety is broken down into the following four categories: fire and emergency services, response time, and fire flow.

(a) *Fire and Emergency Services*. Fire protection, emergency medical response and hazardous materials services are provided by the City of Napa Fire Department (NFD), which has three stations: Station #1, located on Seminary Street between First and Second Street; Station #2, located at Park Avenue and El Dorado near the High School; and Station #3, located at the west corner of Trower and Solano Avenues. Station #1 provides fire service to the central downtown area and south Napa; Station #2 covers central Napa; and Station #3 provides services to the north Napa area. Station #1 (the closest station to the project site) is located approximately three miles north of the Stanly Ranch site, and about four and a half miles from the main resort portion of the site.

In April 1994, the Napa City Council approved a Fire and Paramedic Development Fee to construct and equip a fourth fire station to meet current demand. To date, the

Fire Department has collected approximately \$160,000 (from the Fire Department Development and Equipment fund) and acquired a parcel site on Gasser Drive, about two miles northeast of the project site. A new fire station (Station #4) will be built at this site when construction funds are raised. In 1993, the Fire Administration estimated that a new fire station and related equipment would cost \$1,780,000. That new station will require a minimum of nine additional staff members, at an approximate annual cost of \$845,000 (Perry, 1997).

Forty-eight fire suppression personnel are currently on staff. Six people associated with administration and nine people assigned to Fire Prevention and Code Enforcement compose the remainder of the staff. NFD's daily full-time staff is supplemented by Reserve Firefighters. All City of Napa stations maintain a full-time (around-the-clock) engine company. The Department received 5,119 calls for service in 1996, approximately 64 percent of which were medical emergencies (Perry, 1997).

The Fire Department has three first line engines, three reserve engines, one engine owned by the State of California Office of Emergency Services (O.E.S.), one utility vehicle and one aerial ladder truck (Perry, 1997).

Several fire prevention measures have been implemented in the City of Napa. For example, the City adopted an ordinance (Ordinance 4107) in 1988 which amended the City's Uniform Fire Code (Section 10.306(a)) to require all new construction, both commercial and residential, to incorporate fire sprinklers. The Fire Department also conducts annual inspections of all commercial buildings, which include restaurants, woodworking facilities, auto body shops, warehouses, public assembly, buildings, schools, hospitals, and rest homes. The Napa City Fire Code states that the Fire Chief may require fire apparatus access roads when certain lands are deemed fire hazardous or inaccessible for fire fighting equipment. If deemed so, the Fire Department requires access on an all-weather surface of no less than 12 feet in width.

(b) *Response Time.* Response time to most of central Napa, within a 1.5-mile radius of the three existing stations, is within the target of a five-minute average for emergency calls (Perry, 1997). However, beyond the 1.5-mile radius there is a deficiency in service levels.

Even when Station #4 is built, the Stanly Ranch site will be located outside the target response time of five minutes. Current response time from Station #1 (the closest station to Stanly Ranch) to the farthest point of the proposed site is approximately 13.5 minutes (Perry, 1997). Napa maintains a "Class 4" fire rating on a scale of one to ten ("Class 1" being the most desirable). In addition to its usefulness as a level of



service indicator, the City's fire rating affects property insurance rates for the commercial sector (Perry, 1997).

(c) *Fire Flow.* The City has adopted the following standards for water supply systems:

- New residential distribution lines should provide a minimum residual pressure of 20 pounds per square inch (psi) for fire flows;
- New residential distribution lines should provide a minimum pressure of 50 psi to operate required fire sprinklers;
- New low- and medium-density residential development should be designed to provide a minimum fire flow of 2,000 gallons per minute;
- New high-density residential development should be designed to provide a minimum fire flow of 3,000 gallons per minute; and
- New commercial and hospital development should be designed to provide a minimum fire flow of 3,000 gallons per minute.

b. Impacts and Mitigation Measures.

(1) Criteria of Significance. In accordance with Appendix G of the *CEQA Guidelines*, criteria for measuring the significance of effects on emergency services relate primarily to interference with emergency response plans or emergency evacuation plans. For this EIR, significant police and fire service impacts would occur if the proposed project's demand could not be met by existing police and fire protection services and if the project would result in emergency response times greater than five minutes.

(2) Impacts and Mitigation Measures. The discussion below focuses on impacts related to existing services and the adequacy of emergency response times.

**Impact SER-1: At buildout, the proposed project would increase demands for police service beyond current capabilities. (S)**

At project buildout, new public and/or private personnel would be required to maintain acceptable level of service goals of the NPD. Based on the 1990 Census Bureau estimate of 2.55 persons per household in the City of Napa, an additional 1,515 people would reside in the City of Napa at project buildout.

The Napa Police Department has internal level-of service goals, including police-to-population ratios and response times, although these are not considered adopted City policy. While developments of this type do not typically generate inordinate calls for service, the amount of people projected to be living on and visiting the site resort

facilities or using the public trails would inevitably result in the generation of additional emergency calls. The Napa Police Department aims to respond to highest priority calls (life-threatening emergencies) in no more than 6.5 minutes. Because Stanly Ranch is removed from any other population or retail center in Napa, it is unlikely that responding officers would be nearby when calls were dispatched. Response times in this area are therefore expected to be much higher than average. The remote location of the site would also draw responding officers away from the population core where the vast majority of calls and activities originate, resulting in response time delays in other parts of the City (Monez, 1997).

Security expectations of residents and guests may be inconsistent with what NPD can provide. For example, police do not enforce traffic violations, such as speeding or parking complaints, on private streets. For these reasons, high quality private security is important in meeting police service demands at Stanly Ranch.

The Stanly Ranch site design provides only one route for ingress and egress under normal circumstances. One emergency exit to Cuttings Wharf Road is also planned. The NPD has expressed concerns over the need for improved access to allow better circulation in case of emergencies for both emergency vehicles and on-site residents/visitors. To address these concerns, the initial Stanly Ranch site design was amended to widen Stanly Lane from two to four lanes between SR 29/12 and the south end of the winery/wine center, and two-lane road sections were widened.

Development of the Stanly Ranch project would require the City of Napa Police Department to realign their beats or add a fifth beat. Either option would require additional patrol staffing. The Project Fiscal Impact Analysis (EPS, 1998) concludes that the project will generate a substantial net surplus and that this surplus will fund additional police and fire personnel needed to serve the project. Additional personnel to maintain acceptable levels of service creates no adverse physical change in the environment and thus public personnel needs would be a less-than-significant impact.

Mitigation Measure SER-1a: Consistent with the NPD Police Chief's recommendations, no gate shall be placed at the greeting station at the intersection of Old Suscol Road and Stanly Lane. Alternatively, if a gate is ever proposed, it shall be manned. Security gates may be considered at the entrance of private roads branching off of Old Suscol Road. The applicant may desire to construct a gate at the northern entrance to the resort homes.

Mitigation Measure SER-1b: The Stanly Ranch project shall be patrolled by high quality, on-site, around-the-clock security to meet the recommendations of the NPD.

Mitigation Measure SER-1c: The Declaration of Establishment of Conditions and Restrictions (CC&R's) shall include the ability for private security to levee fines to enforce parking and speeding problems because on-site streets would be private. (LTS)

**Impact SER-2: The proposed project would be located outside of the established response time standard for firefighting services as provided by existing City staff and equipment. (S)**

As noted above, the Stanly Ranch site would be located outside the established response time even after Station #4 is built. Current response time from Station #1 on Seminary Street (the closest station to Stanly Ranch) to the farthest point of the proposed site is approximately 13.5 minutes. According to the City of Napa's Fire Chief, when the company is "in quarters," response time from receipt of alarm to arrival at the scene should not exceed five minutes. Currently, there are no resorts within Napa City limits upon which the Fire Department can base an estimate on calls for service. Using a 1993 report, the Fire Department estimates that Stanly Ranch's residential units would generate an additional 100 annual calls for service, and that the site's commercial development would generate approximately 26 annual calls for service. Due to increases in demand for fire services and slow response times in the area, development of Stanly Ranch would require construction of an additional fire station (which was not considered when a citywide Fire and Paramedic Development Fee was established). This station and related personnel is necessary only with the construction of the Stanly Ranch project (Perry, 1997).

Both an on-site and off-site fire station location to serve the project are discussed and illustrated in Chapter III of this EIR. As stated above, the Fire Administration estimated in 1993 that a new fire station and related equipment would cost \$1,780,000. Along with the new station, the Fire Department would require a minimum of nine additional staff members plus related administration staffing, at an approximate annual cost of \$845,000 (Perry, 1997). The Project Fiscal Impact Analysis (EPS, 1998) concludes that the project will generate a substantial net surplus and that this surplus will fund additional police and fire personnel needed to serve the project. Additional personnel to maintain acceptable levels of service creates no adverse physical change in the environment and thus personnel needs would be a less than significant impact.

Mitigation Measure SER-2a: The project applicant shall pay for the construction of a new fire station to serve the project either on-site or on City-owned property north of the project site. This payment would offset any obligation for payment of Fire and Paramedic Development fees for fire station construction elsewhere in the City.



Mitigation Measure SER-2b: The project applicant shall ensure adequate access to the site for emergency and fire vehicles in accordance with the Napa City Fire Code and standards and Public Works Department standards. This access shall be clearly identified as part of the tentative subdivision maps.

Mitigation Measure SER-2c: The applicant shall comply with all applicable requirements of the Uniform Fire Code, the Fire Department and PWD Standard Specifications and the Fire Department "Standard Requirements for Commercial/Residential Projects," including, without limitation, the requirements for access, new construction, smoke detectors, etc. Existing fire hydrants may be used to meet hydrant location requirements only if they meet or are changed to meet current hydrant specifications.

Mitigation Measure SER-2d: Properties having common ownership shall provide the Fire Department with a notarized copy of the recorded CC&R's in a form satisfactory to the City Attorney ensuring that all components of fire protection system(s) and fire access roads will be maintained by a maintenance district, owner's association, or similar legally-responsible entity.

Mitigation Measure SER-2e: All newly constructed buildings shall have automatic sprinkler systems conforming to NFPA and City Standard Specifications, for which an installation permit must be obtained from Fire Prevention. In multi-unit complexes, or in buildings with three or more stories, special monitoring conditions shall be required. Existing habitable buildings which are retained shall be retrofitted.

Mitigation Measure SER-2f: The applicant of any project proposing a change in occupancy use classification (as defined in the UBC Table 5A) in a building protected by automatic fire sprinklers shall have the sprinkler system evaluated by a licensed fire sprinkler contractor or fire protection engineer for compliance with National Fire Protection Association Installation Standards. A written report of the inspection findings shall be submitted to the Fire Department prior to final occupancy clearance. A permit is required from Fire Prevention for sprinkler system alterations.

Mitigation Measure SER-2g: The developer for any project which proposes commercial occupancies shall secure approval from Fire Prevention and Building Departments prior to signing lease agreements and allowing occupancy of prospective occupants that pose possible fire and life safety hazards or are classified by the UBC as an H (Hazardous) occupancy. (LTS)

## 2. Schools

a. Setting. The Napa Valley Unified School District (NVUSD) provides public education for residents of the City of Napa and surrounding areas. The District covers approximately 259 square miles in Napa County. NVUSD was created in July 1965 with the unification of 12 elementary districts and one high school district. The district currently has 21 elementary schools, two middle schools, two comprehensive high schools, a technology-based magnet high school, and a continuation high school. A comprehensive adult education program provides educational services community-wide (Dencavage, 1997).

Since the mid 1980's, enrollment at Napa Valley schools has steadily increased. As of May, 1998, 15,975 students were enrolled in public schools; 8,886 in elementary schools, 2,463 in middle schools, 4,433 in high schools, and 193 in other public school programs. Increased enrollment has been accommodated by the addition of relocatable classrooms at various schools in the District. NVUSD has 206 relocatable classrooms on the 27 active school sites. In addition, construction is currently underway for the American Canyon Middle School (Dencavage, 1997).

All District schools are currently at capacity. In 1996-97, NVUSD implemented Class Size Reduction for kindergarten and grades one and two. The following schools (all operating at capacity) are located near the attendance area for Stanly Ranch: Carneros Elementary (165 students enrolled), 1 mile west of the site; Snow Elementary (392 enrolled), 2 miles north of the site; Silverado Middle School (1,145 enrolled), 4 miles northwest of the site; and Napa High School (1,934 enrolled), 4 miles north of the site (Dencavage, 1997).

When requested, transportation is provided for children attending private or parochial schools within the district's boundaries under the provisions of Section 48222 of the Education Code. Students may be entitled to school bus transportation if the distance traveled between their homes and school of attendance exceeds the commuting distances established by the Board. The one-way walking distance guidelines are as follows: 1.25 miles for kindergarten through sixth grade; 3 miles for grades seven and eight; and 4.25 miles for high schools. Mileage limits are measured from the school to the approximate middle of the subdivision or area (Dencavage, 1997).

NVUSD uses a range from 0.42 to 0.70 students per household to project enrollment from new residential development. This estimate is based on the total number of households within the District divided by the District enrollment. As of July 1, 1998, the State Allocation Board has set School Facilities Fees at \$1.93 per square foot for residential development and to \$0.31 per square foot for commercial/industrial development as part of the bi-annual adjustment for inflation.

NVUSD fees are consistent with the State Allocation Board fees. According to NVUSD, current fees are insufficient to meet the demands for student enrollment produced by additional housing (Dencavage, 1998).

b. Impacts and Mitigation Measures.

(1) Criteria of Significance. While important to the quality of life in the project area, impacts to schools from increased development do not typically result in physical environmental impacts. In *Goleta Union School District v. Regents of the University of California* (1995), the Court of Appeal found that "Classroom overcrowding, per se, does not constitute a significant effect on the environment."

Although changes to public facilities and services brought on by a project are not regarded as significant impacts under CEQA, an analysis is required under CEQA to discuss impacts related to physical changes to the environment from the construction and operation of new or expanded facilities. At this time, no new school facilities are proposed as part of the project.

(2) Impacts and Mitigation Measures. The following impact would be less than significant.

***Impact SER-A: The Napa Valley Unified School District would be unable to accommodate the increase in students generated by Stanly Ranch. This impact would be less than significant because overcrowding, per se, would not constitute a significant impact on the environment, and no schools are proposed as part of the project. (LTS)***

As stated above, all NVUSD schools are currently operating at capacity. Based on NVUSD's student-per-household estimate, the Stanly Ranch project (assuming 600 non-resort units) could generate an additional 252 to 419 new students. The NVUSD projects that Stanly Ranch would generate 141 to 235 elementary school students, 40 to 67 middle school students, 68 to 113 high school students and three to four students in other public school programs. Based on NVUSD fee requirements, Stanly Ranch would be required to contribute over \$2.0 million for school facilities to accommodate increased demand.

Condition of Approval SER-A: Stanly Ranch shall comply with state law to accommodate increased demand on school facilities and services by paying the required fees. (LTS)



### 3. Parks and Recreation

a. Setting. The Napa Community Resources Department (CRD) is responsible for developing and maintaining the City's 39 parks, 20-acres of street landscaping, 35,000 street trees, and the landscaping on City facilities and parking areas. In addition, CRD provides recreation services to more than 22,000 participants (youths and adults) through a variety of programs, including After School Recreation, Recreational Classes, Cultural Arts, Summer Youth Camp, Sports, Summer Aquatics, and Senior Citizen programs. The Community Resources Department also produces the City newsletter and administers the City's Community Development Block Grant Program, which provides over \$700,000 (Fiscal Year 1996-1997) in federal funding to approximately 30 community organizations. The CRD has 40 employees, the majority (27) of whom are assigned to the Parks Division, which maintains approximately 753 acres of City parkland.

(1) Parks. Napa's parks are divided into three categories. *Citywide facilities* include active recreation and/or open space areas which are of significance to the entire community. Large open grassy areas, trail corridors and boat launches are examples of features of citywide parks. The target standard for citywide parkland is 6 to 10 acres per 1,000 residents. *Community parks* have a service area of 1.5 to 2 miles, and include active recreation facilities such as ball fields and community centers. The target standard for community parks is between 1.2 and 1.5 acres per 1,000 residents. *Neighborhood parks*, which generally include a children's playground, small level grass area, and picnic area, provide informal general use play areas for neighborhoods within a 0.25 to 0.5-mile radius. The target standard for neighborhood parks is the same as that for community parks. *Mini-parks and civic spaces*, used primarily as neighborhood play areas, make up the remainder of the City's park space. The City does not accept such spaces for dedication from new developments due to the high cost of maintenance.

Developer fees are the main source of funds for acquisition and development of City parks. State law (the Quimby Act) authorizes local governments, as a condition of a subdivision map, to require the dedication of land or impose a requirement for the payment of fees in lieu thereof in an amount which, in Napa, is based on a ratio of 2.5 acres of park area per 1,000 residents.

Both dedication fees and development fees are set at the beginning of each fiscal year (July 1) by the City's CRD. The fees are determined by evaluating the following: the average cost of purchasing an acre of land within the City; an estimated average of park development costs; and an assessment of park needs (based on a factor of 2.5 acres per 1,000 residents) (City of Napa, 1996). In practice, park fees have not kept pace with the rising value of land, and there is often a deficit between increased demand for parks, the cost of parkland acquisition and

development, and the revenues raised by new residential development in the City. As a result, the CRD reports that existing park and recreational facilities are insufficient to meet the needs of today's population.

A review of existing community and park sites indicates that the greatest deficit in park services exists in the eastern and southern parts of the City. John F. Kennedy Regional Park (Kennedy Park), the largest City park at 346.9 acres, is the only public park in the City of Napa within two miles of Stanly Ranch. Kennedy Park is located along the Napa-Vallejo Highway south of Napa Valley College, to the north of the site (see Figure IV.A-3). Recent improvements at the park include an 18-hole golf course, soccer and softball fields, a recreation building, boat launch, playground and tot lot, picnic areas, parking and restrooms.

(2) Trails. The *City of Napa Parks and Recreation Master Plan* (City of Napa, 1996) states that the development of a comprehensive multi-use trails system is a major parks and recreation objective. At the present time, no formal public trails exist on the site or in the immediate vicinity. The *Draft SRSP* proposes development and dedication of several trail alignments through the project site.

The Citywide Trails Plan (City of Napa, 1996) proposes a multi-use River Trail segment on the property and a Bay Trail pedestrian/bicycle link on Golden Gate Avenue south to Stanly Lane, then south on Stanly Lane to Old Suscol Road where it heads west to Cuttings Wharf Road. The City's Bay Trail route through the Stanly Ranch provides a logical connection to regional Bay Trail routes at Imola Avenue to the north and Cuttings Wharf Road to the west of the site.

The Bay Trail, a regional hiking and bicycling trail which will connect more than 90 parks and publicly accessible open space areas around the perimeter of San Francisco and San Pablo Bays, is being planned by the Association of Bay Area Governments (ABAG) as part of a State-sponsored program. Development is in cooperation with individual public agencies in whose jurisdiction the trail alignment is located.

To help implement the Citywide Trails Plan, the *Draft SRSP* proposes to dedicate and construct a 2.1 mile long segment of the Bay Trail for public access through the project site. The Bay Trail would enter the site from the north at the intersection of SR 12/121 and Stanly Lane, follow alongside Stanly Lane, then traverse westward along Old Suscol Road to the western edge of the site at Cuttings Wharf Road (see Figure III-16). If a 20-foot public access easement is assumed for 12 to 14-foot wide trails, this trail as proposed would provide approximately five acres of citywide trails throughout the project (City of Napa, 1997).

Additionally, the project proposes to dedicate and construct a segment of the River Trail, described as part of a “multi use trail planned from the Stanly Ranch to Trancas Street” in the Parks and Recreation Element (City of Napa, 1996). The Citywide Trails Plan states that this trail is to connect to the marshes to the south across Stanly Ranch. The presence of wetlands is cited as a barrier which could affect extensions of the trail.

As noted in Chapter III of the EIR (Project Description), the following approach is proposed by the applicant to provide a trail fulfilling the following objectives: reaching the marshes and Napa River from the Stanly Ranch property; providing enjoyable walks and rides; complementing proposed land uses; avoiding sensitive wetland areas; and not precluding possible future trail connections to the southwest of the City limits. Figure III-16 shows the following:

- *Project Proposed River Trail:* This two-mile trail would extend along Stanly Lane from Old Suscol Road to an employee/public parking lot and continue to a set of loops near the SR 29 bridge. One loop crosses under the SR 12/29 bridge and follows the upper elevation areas of this part of the Lowlands (Loop 1N). A second loop follows the upper elevation areas south to the PG&E easements, then returns along the PG&E access road to the parking lot (Loop 2N). The trail alignment is nearly completely on upper elevation (non-wetland) lands. With adjacent public access parking, it would provide approximately 4.75 acres of citywide trails facilities on the property.
- *Project River Trail (Future Addition):* In order to keep future trail options open, a second loop trail has been identified and evaluated, although the feasibility of an extension through County lands offsite is unknown and is beyond the scope of this document. In the event a trail were ever extended along a historic railroad bed from Cuttings Wharf Road, this trail would follow an upland alignment across the South Lowlands to the river levee where upper elevation lands could be used for a loop trail. The applicant refers to this potential trail as the Future Southerly Loop. The project would make irrevocable offers of dedication for this Southerly Loop with the Final Map at an appropriate time specified in the Development Agreement. The trail easement could be accepted and the trails constructed by the City when/if desired. Meanwhile, the trail would be defined and improved to a limited extent for use by project residents.

The Citywide Trails Plan states that “Details of the final alignment and environmental considerations of the [river] trail in this [Stanly Ranch] area will be considered in the Stanly Ranch Specific Plan and EIR.” To assist in the evaluation, two alternative river trail alignments have also been evaluated. The alternative trail alignments are described in Table D-1 and are shown on Figure D-1 in Appendix D. They are further addressed in Appendix D as to their impacts and feasibility.



b. Impacts and Mitigation Measures.

(1) Criteria of Significance. A project may be deemed to have a significant effect on parks and recreation facilities if it will increase the demand for neighborhood or regional parks or other recreational facilities.

(2) Impacts and Mitigation Measures.

**Impact SER-3: Development of Stanly Ranch would result in an increase in demand on parks and recreational facilities. (S)**

Any additional development on the Stanly Ranch site would result in the need to provide additional parkland and recreational facilities in accordance with the City's Park and Recreation Standards. City Parks and Recreation standards are to provide a total of 12 acres of active and passive parkland per 1,000 residents through a variety of means: through review of new development, grants programs, private sources, etc.

Assuming a residential population for Stanly Ranch of 1,515 persons (594 dwelling units at 2.55 persons per household), the *Citywide* parkland, open space areas and trails "target standard" is nine to 15 acres. The *General Plan* Parks and Recreation Element policies specifically identify two Citywide Trails: a Bay Trail and a River Trail, to be located on Stanly Ranch. The project would meet these policies by providing land and/or construction for the two trails totaling approximately 9.75 acres.

City *community* park "target standards" are another 1.8 to 2.27 acres of parkland. City *neighborhood* park target standards would result in an added 1.8 to 2.27 acres of parkland. To help implement these "target standards", the City's Quimby Parkland dedication ordinance would require dedication or payment of equivalent in lieu fees for 3.79 acres of parkland. Fees generated by this ordinance may be used to provide planned neighborhood, community, or citywide park facilities. Additionally, given the distance of this site to public neighborhood facilities, the *Draft SRSP* has proposed construction of 2.25 to 2.5 acres of private neighborhood parks onsite.

The *Draft SRSP* proposes construction of a 179-acre private golf course open to the public on a pay-for-play basis, 2.25 to 2.5 acres of private neighborhood parks to be located within the proposed residential neighborhoods, a small, private (or non-profit) owned and operated Environmental Interpretive Center adjacent to the proposed River Trail, and approximately 9.75 acres of public trails to be dedicated with the project. The Bay Trail and potentially the River Trail Northerly Loops would also be constructed with the project, as well as dedication of another 2.5 acres for a future River Trail addition (Future Southerly Loops). An unusual benefit

of the project is that the applicant proposes to provide ongoing maintenance of the Bay Trail through the project site. Proposed private neighborhood parks would help offset new demand for public neighborhood parks.

It is also possible through Development Agreement negotiations, but not currently proposed, that if the fire station is located on the City-owned site immediately north of the project site, it would be developed in conjunction with a planned 2.6-acre City park on that site.

Mitigation Measure SER-3a: The Stanly Ranch shall assist the City in meeting adopted parks and recreation policies and standards through dedication and construction of the Bay Trail and the River Trail Northerly Loops, and dedication of the Southerly Loop.

Mitigation Measure SER-3b: Developer shall pay the required fees for each new dwelling unit in accordance with Napa Municipal Code (NMC) 15.68. Such fee shall be payable at the rate in effect at the time of payment for the unit involved. The findings set forth in such chapter and Resolution 92-084 are incorporated herein. The City further finds that calculation of the fee due pursuant to the formula set forth in NMC Section 15.68.040 demonstrates there is a reasonable relationship between the fees imposed and cost of the improvements attributable to this project.

Mitigation Measure SER-3c: Unless project approval requires only land dedication, the Developer shall pay the required fees for each new dwelling unit in accordance with and for the purposes of NMC Sections 16.32.040, NMC 15.68.010 and 15.68.090 for each residential unit authorized or allowed by project approval. Such fee(s) shall be payable at the rate in effect at the time of payment for the unit involved. The findings set forth in such chapter and Resolution 92-084 are incorporated herein. The City further finds that calculation of the fee due pursuant to the formula set forth in NMC Section 15.68.040D demonstrates there is a reasonable relationship between the fees imposed and cost of the improvements attributable to this project. (LTS)

#### **4. Solid Waste**

a. Setting. Napa Garbage Service collects garbage in the Napa area. Stanly Ranch would be served by Napa Garbage Service for the collection of trash, recyclables and compostables. Napa Garbage Service transports collected waste to the South Napa Transfer facility, at which point it is loaded on railroad cars and hauled to a landfill owned by Rabanco in Eastern Washington state. The City of Napa entered into a ten-year contract with the Rabanco Landfill in 1994 (Kelley, 1997).

The City of Napa is responsible for implementing the *California Integrated Waste Management Act of 1989 (AB 939)* as well as waste diversion programs that have been developed in response to this Act. Additionally, the *California Solid Waste Reuse and Recycling Access Act of 1991* mandates cities and counties to divert 50 percent of all solid waste by January 1, 2000, through source reduction, recycling, and composting activities. As part of its franchise agreement with the City, Napa Garbage Service agrees to comply with AB 939.

The City of Napa offers a full range of recycling services to encourage waste stream diversion in the commercial, industrial, and residential sectors. The current curb-side recycling available to Napa City residents and businesses includes the collection of the following materials: glass, newsprint, mixed paper, magazines, cardboard, chipboard, drink boxes and milk/juice cartons, aluminum and tin cans, #1 and #2 plastics, yard waste and white goods (ovens, refrigerators, microwaves and other appliances). Businesses and offices can also make arrangements for the pick-up of most types of office paper. In addition, Napa Garbage Service recycles construction waste, including wood, concrete and metal, although there are no City requirements regarding the recycling of such materials. Residents and businesses have an economic incentive to recycle since it is provided as a free curb-side pick-up service. Trash collection, on the other hand, costs \$17.42 per month for the weekly curb-side pick-up of one 20-gallon toter (typically used by a single-family residence). Trash from additional "drop boxes" (large metal garbage bins) is collected by Napa Garbage Service for \$26.47 per cubic yard (Kelley, 1997).

b. Impacts and Mitigation Measures.

(1) Criteria of Significance. For this EIR, a significant impact would occur if the proposed project would breach published federal, state, or local standards relating to solid waste, litter control, or recycling (specifically, not conform with the *California Integrated Waste Management Act of 1989* or the *California Solid Waste Reuse and Recycling Access Act of 1991*).

The project would not breach federal standards related to solid waste as these have not yet been established. Conformance with the *California Integrated Waste Management Act of 1989* or the *California Solid Waste Reuse and Recycling Access Act of 1991* would occur under the City's existing collection programs.

(2) Impacts and Mitigation Measures. The following impact would be less than significant.

***Impact SER-B: Solid waste generation would increase during final design and site planning, construction, and post-construction or build-out of the project. (LTS)***



During the post-entitlement phase of the project, the applicant would prepare a detailed Source Reduction and Recycling Plan (SRRP). The SRRP will address the following three phases of the project: final design and site planning, construction, and post-construction or build-out.

The SRRP would provide that during the final design and site planning of the project, the Master Developer would work closely with the City of Napa Waste Reduction/Recycling Coordinator and staff of the Napa Garbage Service to review site plan elements (e.g. road layouts, turning radii's, refuse container locations, areas for the storage and collection of solid waste/recycling materials, etc.) so that they would facilitate the company's automated refuse collection system.

The SRRP would provide a program for the collection of discarded materials during project construction in a manner to promote recycling of these discards. Materials that would be collected and recycled include wood, concrete, sheetrock or gypsum board, sheet metal, asphalt and cardboard. Additional scrap materials may be added to this list based on consultation with the recycled material collectors. It is expected that the construction contractors would voluntarily participate in this program since they would have an economic incentive to minimize the cost of disposing of their discards.

The eucalyptus trees cleared during project construction are expected to be recycled in two ways. The logs that are produced would be shipped off-site and used for paper pulp production. The slash that remains from eucalyptus logging operations and from vegetation other than eucalyptus trees which is cleared would be chipped on-site and used either as mulch or as a fuel source for off-site cogeneration facilities.

The SRRP would develop a program with quantitative, measurable objectives to reduce the total amount of discards generated by the project after construction, and to provide for the recycling of discarded materials. The SRRP would address the residential and non-residential sectors of the project.

The golf course manager would collect and compost all vegetative material produced by the maintenance of the golf course. The composting facility would be located in the Golf Course Maintenance Yard. Discarded vegetative material (i.e. grape skins, seeds and stems) produced by the winery would be collected for composting either on-site or by the City of Napa's franchised waste handler, Napa City Garbage.

Condition of Approval SER-B1: The applicant shall prepare, implement and administer the Source Reduction and Recycling Plan (SRRP) during the construction phase of the project. As the project is builtout, this responsibility shall be transferred to the various homeowners associations in

the residential sector, and to the individual operators of the resort, golf course, winery and wine center for the non-residential sector. The SRRP shall provide that it shall be reviewed and updated every two years, and that it meets the City's Source Reduction and Recycling Element, with approval by the Public Works Director.

Condition of Approval SER-B2: At the final design phase, recycling facilities shall be provided in all areas where solid waste generating activities may occur.

Condition of Approval SER-B3: During the construction/demolition and renovation period of the project, the applicant shall use the franchised garbage hauler for the service area which the project is located to remove all wastes generated during project development, unless applicant transports project waste. If the applicant transports the project's waste, applicant must use the appropriate landfill for the service area in which the project is located.

Condition of Approval SER-B4: The applicant shall provide for the source separation of wood waste for recycling. Developer shall use the franchised garbage hauler for the service area in which located for collection of such wood waste, unless the applicant transports such wood waste to a location where wood waste is recycled.

Condition of Approval SER-B5: Recycling/solid waste enclosures shall be provided in accordance with Chapter 17.102 of the Napa Municipal Code (NMC) for all commercial, industrial and multi-family projects with common solid waste facilities. (LTS)





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## K. PUBLIC UTILITIES

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This section of the EIR addresses water supply, wastewater, reclaimed water, and gas and electrical services.

<b>1. Setting</b>
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a. Water Supply.

(1) Source, Supply, and Demand. The project site is located within the rural urban limits (RUL) of the City of Napa (City). Areas within the RUL receive water supply from the City. The City's current water sources are from Lake Hennessey Reservoir, Milliken Reservoir, and the North Bay Aqueduct (NBA) System. Water supplied by the NBA system originates from the State Water Project (SWP) facilities and is made available to the City under a contract between the Napa County Flood Control and Water Conservation District (NCFCWD) and the California Department of Water Resources (DWR). The contract entitles the City to annual increases in water supply to keep pace with development. The City's 1997 entitlement is 6,600 acre-feet and will increase at a rate of 400 to 500 acre-feet per year through the year 2021; the maximum entitlement scheduled to be met in the year 2021 is 18,800 acre-feet (Parsons HBA, 1997; West Yost & Associates et al., 1997). Raw water collected from the above sources is treated at three independent treatment plants ( Hennessey Water Treatment Plant, Milliken Water Treatment Plant, and Jameson Canyon Water Treatment Plant) and is then distributed throughout the City's service area.

The City's current annual total water supply under normal hydrologic conditions is 14,200 acre-feet and 8,300 acre-feet under drought conditions (firm yield).<sup>1</sup> The reduction in water supply under drought conditions is due primarily to cutbacks in SWP entitlements. In 1991 and 1992, the City's SWP allotted entitlement was reduced by 80 and 55 percent, respectively, because of drought conditions experienced in the State between 1987 and 1992 (City of Napa, 1996a).

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<sup>1</sup> Firm yield based on delivery of 50 percent of the City's SWP entitlement.

Current water demands under normal and drought conditions are 13,600 and 10,800 acre-feet, respectively (Table IV.K-1) (West Yost & Associates et al., 1997). The City's peak water demand typically occurs in the summer, and ranges between 1,200 and 1,900 acre-feet per month. Approximately 500 to 800 acre-feet per month of water are supplied during the winter season (West Yost & Associates et al., 1997).

**Table IV.K-1  
CITY OF NAPA CURRENT AND PROJECTED  
ANNUAL WATER SUPPLY AND DEMAND<sup>a</sup>**

<b>Year</b>	<b>Supply (acre-feet/yr)</b>	<b>Demand (acre-feet/yr)</b>	<b>Deficit (acre-feet/yr)</b>
Current (Normal Hydrologic Conditions) <sup>b</sup>	14,200	13,600	--
Current (Drought Conditions) <sup>b</sup>	8,300 <sup>c</sup>	10,800	2,500
Year 2000 (Normal Hydrologic Conditions)	16,300	14,500	--
Year 2000 (Drought Conditions)	9,400 <sup>c</sup>	11,600	2,200
Year 2010 (Normal Hydrologic Conditions)	21,200	15,100	--
Year 2010 (Drought Conditions)	11,800 <sup>c</sup>	12,100	300

<sup>a</sup> The water supply demand includes projected growth demands identified in the *Draft General Plan* for the City of Napa. The projections assumed an average water demand of about 0.2 mgd for the proposed project. Projected development assumed the construction of 600 units, 64,000 square feet of retail space, and 2.6 acres of park. (Phil Brun, Civil Engineer, City of Napa, personal communication, November 7, 1997 and December 3, 1997.)

<sup>b</sup> Represents the year of 1995

<sup>c</sup> Value represents firm yield; firm yield based on delivery of 50 percent of City's SWP entitlement.

Source: West Yost & Associates, Brown & Caldwell, and SPH Associates, August 1997, City of Napa Draft Water System Optimization and Master Plan, Volume II - Master Plan Report.

Although the City has sufficient water to meet demands under normal hydrologic conditions, the City has an insufficient firm yield to meet water demands under drought conditions. The current estimated deficit is about 2,500 acre-feet, based on the estimated firm yield projections (Table IV.K-1) (West Yost & Associates et al., 1997). During previous drought years, the City implemented voluntary and mandatory conservation programs that achieved up to a 33 percent reduction in water consumption. The Final EIR for the City of Napa Water System Optimization and Master Plan (WSOMP, p. 3.8-10) states:

"It should be noted that based on past experience, the City has demonstrated that there is sufficient supply, when combined with conservation practices, to ensure that there will be adequate water to preserve the health and safety of the citizens of Napa. The drought impact would consist of a potential loss of landscaping due to landscaped irrigation cutbacks and a certain level of

inconvenience to citizens as they implement conservation practices in daily living.”

In addition, the City was able to obtain water from alternative sources in order to compensate for the shortage during previous drought conditions. Alternative sources included the Yuba County Water Agency and “Interruptible Entitlement” water deliveries from the SWP.<sup>2</sup> Although the amount of water provided from year to year cannot be predicted, these alternate water supply sources were sufficient to meet the needs of the City during drought conditions in the past.

The City has not yet been able to secure a guaranteed alternative water source for future drought years. However, the City has applied to modify the current contract between NCFCWD and the DWR to accelerate the scheduled entitlement increases through the year 2021. This would enable the City to adequately satisfy water demands, even during drought year conditions (City of Napa, 1997a). The City is also exploring the possibility of participating in the SWP Drought Water Bank, American Basin Conjunctive Use Project, and the SWP Supplemental Water Purchase Program. The SWP Drought Water Bank program has recently been formalized and is in the process of developing implementation plans; the two latter projects are still in the development stage. In the event that the City should experience a water deficit during a drought, these alternate sources may become available. The City may also be able to access water from Yuba County Water Agency and “Interruptible Entitlement,” as was done in prior years.

One other source of water may be used within the City of Napa to decrease the overall deficit during drought years; the City may be able to use reclaimed water from Napa Sanitation District (NSD). The NSD charges \$250/acre-foot for reclaimed water; the price may be adjusted with a Consumer Price Index through the year 2000. This price is competitive with the City of Napa water supply source. The City and NSD have finalized an agreement for use of reclaimed water within applicable areas of the City’s water service area as of July, 1998. This sets the stage for the City to satisfy some of its existing potable water demand with reclaimed water. The agreement allows NSD to serve recycled water to irrigation customers within the City’s water service area, including Stanly Ranch (Stewart, 1998).

(2) Policies and Program. Policies have been established in the 1997 adopted WSOMP and 1996 *Draft General Plan*, as updated in the December 8, 1997 Addenda, to address the City’s drought year deficits until a reliable/guaranteed source is secured. (Existing *General Plan* policies are much more general but state that adequate water supply shall be maintained to cover the needs of the community

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<sup>2</sup> Interruptible Entitlement water deliveries are obtained during a surplus of flow from the Delta, and are typically available during the wet winter months.



with particular emphasis on fire protection.) *Draft General Plan* water policies applicable to new developments in the Community Service Element are listed below. Although the City has not yet adopted its new *General Plan*, the Council's approval of the Water System Optimization and Master Plan committed the City to adopt, as part of its new *General Plan*, the policies requiring a showing of water availability prior to issuance of building permits. The policies applicable to water supply issues for the project include:

- *The City shall continue to implement water conservation programs that show promise of saving significant amounts of water at a reasonable cost (Community Services Policy CS-9.1) (City of Napa, 1997b).*
- *The City of Napa shall determine the firm yield available from existing and future SWP water supply sources and shall monitor and, if necessary, limit growth (new water system hook-ups) in order to guarantee drought year water supplies to existing and proposed development. Growth shall be monitored, and if necessary, limited as follows:*
  - 1) *The City shall not issue any building permits or similar ministerial entitlements for proposed structures that would increase net potable water consumption in the City or its service area in the absence of a letter from the Department of Public Works stating that approval of the permit or other entitlement will not adversely affect the City's ability to adequately serve the public health and safety needs of all of its water customers during drought conditions.*
  - 2) *In addition, when conducting environmental review for proposed development projects requiring General Plan amendments, specific plans, use permits, tentative subdivision maps, or similar discretionary approvals, the City shall include within the environmental document information assessing whether the City and its water suppliers are likely to have sufficient water supplies to adequately serve the proposed development and all other City water customers during drought conditions. In approving any such discretionary project, the City shall require, as a mitigation measure and conditions of approval, that the applicant(s) may not receive a final subdivision map or in the absence of the need for such a map, may not receive building permits or similar ministerial entitlements in the absence of a letter from the Department of Public Works stating that the approval of the map, permit or other ministerial entitlement will not adversely affect the City's ability to adequately serve the health and safety needs of all of its water customers during drought conditions and that there will be sufficient water to serve the basic health, hygiene, and fire suppression needs of the community.*

*When contracts are modified or are executed with the SWP to secure additional reliable water supply for drought years or other dependable and adequate sources are guaranteed, the requirement to limit growth in the manner described above can be suspended (Community Service Policy CS -9.3 ) (City of Napa, 1997b).*

- *The City shall implement the "Water System Optimization and Master Plan" (adopted 11/97) which refines policies and implementation programs for efficient water supply, storage, and delivery for projected demand to the year 2020 (Community Services Policy CS-9.4) (City of Napa, 1997b).*
- *Where new development requires the construction of new public facilities, the new development shall fund its fair share of the construction of those facilities. The City shall require dedication of land within newly developing areas for required public facilities, as allowed by law (Community Services Policy CS -1.2) (City of Napa, 1996b).*
- *The City shall ensure through the development review process that adequate public facilities and services are available to serve new development (Community Services Policy CS -1.3) (City of Napa, 1996b).*
- *The City shall require, to the extent legally possible, that new development pays the cost of providing new public facilities and services and/or the costs for upgrading of all existing facilities that it uses, based on the demand for these facilities attributable to the new development; exceptions may be made when new development generates significant public benefits (e.g., low-income housing, significant primary wage earner employment) and when alternative sources of funding can be identified to offset foregone revenues (Community Services Policy CS -1.4) (City of Napa, 1996b).*
- *The City shall require that all new development meet adopted service levels for public facilities as established in the General Plan (Community Services Policy CS -1.7) (City of Napa, 1996b).*

In January 1991, the City of Napa established Municipal Code 13.09.010 (Retrofit Program for New Development), Permanent Water Conservation Regulations. The purpose of the program was to gradually and permanently reduce water usage in the City. A Public Works handout explaining the Retrofit Program for New Development states:

*"The project is intended to allow development to continue throughout the City of Napa without causing an increase in City water use, and to create long-term water savings that otherwise would not occur. The City of Napa Water Division will allow a developer to build a project if he makes changes to existing residential development that will*

permanently reduce water use equal to the water needs of the development.”

All developments requiring a building permit after 15 January 1991 are subject to the program. The program requires building permit applicants to retrofit existing high flow fixtures (shower heads, interior faucet aerators, and toilets) in existing homes and noncommercial buildings. The number of homes requiring retrofit is based on calculations established by the City.

The WSOMP for the City of Napa was prepared in 1997 to evaluate the capacity of existing water supply facilities and address future demands through the year 2020 for the City of Napa (West Yost & Associates et al., 1997). The WSOMP's projected water demands for the City include the water demand projections for the Stanly Ranch development (Brun, 1997 and Hasser, 1997). The projections assumed an average water demand of approximately 0.23 million gallons per day (mgd), which reflects both existing and future average potable water demands for the Stanly Ranch project area of 0.019 mgd and 0.213 mgd, respectively.

Water-related policies in the *Draft SRSP* include:

- *Extend water service from the City of Napa's 36-inch pipe within the Stanly Ranch as required to adequately service planned development (Policy 1.6).*
- *Loop water transmission lines as necessary to ensure continuous water service and reliability (Policy 1.7).*
- *Support water conservation measures and participate in the City's off-site Retrofit Program for New Development (Policy 1.8).*

b. Wastewater and Reclaimed Water. The project includes two alternatives for wastewater treatment for the project. The preferred alternative consists of discharging wastewater to the Napa Sanitary District (NSD) for treatment. The second alternative provides for a new on-site wastewater treatment/reclamation facility in the Northern Lowlands area of the project site. This section evaluates the preferred alternative only. The second alternative is discussed in Chapter V.D of this EIR.

(1) Capacity and Demand. The NSD provides wastewater treatment and disposal services for the City of Napa, Silverado Country Club area, Napa State Hospital, and industrial parks around the Napa County Airport. NSD's Suscol Treatment Plant treats all wastewater generated within the NSD boundaries. The existing hydraulic capacity of the plant is 15.4 mgd.

The average summer wastewater flows to the plant are about 8 mgd. Although the winter wastewater flows are dependent on the weather conditions, the peak winter



flow rate to the plant has reached 40 mgd (Herrick, 1997).<sup>3</sup> The plant is frequently overloaded (i.e., flows exceed capacity) during the winter season. The plant's overloading problems are caused by the increased inflow to the treatment plant, oxidation pond inefficiency as a result of reduced sunlight, and inadequate disposal/storage of recycled water (Stewart, 1997 and Jensen, 1998). A 1990 Master Plan was prepared for the NSD and recommended improvements to address wastewater treatment and disposal needs for the City through the year 2020. Preliminary design stages of the Plan were approved by the NSD Board of Directors in 1997. A Phase 1 water recycling project was completed in February, 1997. In July, 1998, the Phase 2 construction contract was awarded for expansion of treatment capacity to serve 10 years projected growth. That project is scheduled for completion in November, 2000 (Healy, 1998). However, NSD is not currently able to guarantee available capacity for future development within its service area until the improvements have been completed (Stewart, 1997). However, NSD is not currently able to guarantee available capacity for future development within its service area until the improvements have been completed (Stewart, 1997).

(2) Policies. Existing *General Plan* policies regarding wastewater are found within the general policy that "A full range of community related services shall be provided within City limits..." Community Service policies of the 1996 *Draft General Plan* were established to reduce wastewater service demands on NSD from new developments. These policies include:

- *The City shall promote reduced wastewater system demand through efficient water use by: a) requiring water-conserving design and equipment in new construction (Community Service Policy CS -10.1a).*
- *The City shall support continued efforts by the NSD to promote the use of reclaimed wastewater (Community Service Policy CS - 10.2).*
- *The City shall coordinate development review with the NSD to ensure that adequate wastewater collection, treatment, and disposal facilities can be provided by the District by requiring that all new applicants for development secure a "will-serve" letter from the NSD if the District notifies the City that a critical capacity situation exists.*

*Where a critical capacity situation does exist, the City shall not issue, in the absence of a will-serve letter from the NSD, any building permits or similar ministerial entitlements for proposed structures that would increase net demand on NSD treatment capacity. In addition, when conducting environmental review for proposed development projects requiring General Plan amendments, specific plans, use permits, tentative subdivision maps, or similar discretionary approvals, the City shall include within the*

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<sup>3</sup> The increase in wastewater generation during the winter months is due to infiltration and inflow problems from the distribution system (Herrick, 1997).

*environmental document, information assessing whether NSD is likely to have sufficient capacity to serve the proposed development.*

*In approving any such discretionary project, the City shall require, as a mitigation measure and condition of approval, that the applicant(s) shall obtain the necessary will-serve letters from NSD prior to receiving approval of a final subdivision map, or in the absence of the need for a final subdivision map, prior to receiving approval of any required building permits or similar ministerial approvals (Community Service Policy CS -10.3)(City of Napa, 1997b).*

The policies contained in the *Draft SRSP* applicable to wastewater and reclaimed water include:

- *Provide necessary on-site sanitary sewer facilities to adequately serve planned development (Policy 1.4).*
- *Locate a sanitary sewer pump station and force main to access NSD facilities across the Napa River from Stanly Ranch, as generally located in Figure 21.<sup>4</sup> Carefully integrate siting, access, and landscape screening of the station within the site. As an alternative, provide for an on-site wastewater reclamation facility (Policy 1.5).*
- *If economically feasible, install reclaimed water transmission lines within the Stanly Ranch. Utilize reclaimed water for irrigation of the golf course, landscaping, and for common areas and private yards if practical (Policy 1.9).*

c. Storm Water. Storm water issues are addressed in Section IV.4-E, Hydrology and Water Quality, of this EIR.

d. Gas, Electric and Telecommunications Services. Pacific Gas and Electric (PG&E) supplies municipal gas service to the City of Napa and the site. A high pressure gas main currently exists on the site. A 26-inch, 450-pound gas pipeline runs along Stanly Lane and crosses under the Napa River approximately 1,400 feet south of State Route 29. A second, 16-inch, 450-pound gas transmission main traverses the southern portion of the site and crosses under the Napa River approximately 1,500 feet south of the aforementioned line. Valve controls are located on the levees where the lines cross the river. Stanly Ranch is not obligated to maintain the levees to provide PG&E access to their facilities, but project developers would coordinate with PG&E in developing a modified levee management program. The 16-inch southern main serves as the primary provider of gas to the entire City of Napa.

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<sup>4</sup> Reference to Figure 21 is for the *Draft SRSP* dated May 1997.

PG&E also supplies electricity to the City of Napa and the project site. PG&E reviews all proposed development projects to ensure that sufficient energy generation and delivery capabilities are available. Stanly Ranch is served by 12,000-volt electrical lines. A PG&E pole-line easement runs along Stanly Lane and a 75-foot tower line easement runs perpendicular to Stanly Lane and crosses over State Route 29 approximately 2,000 feet south of the intersection with SR 12/121. Energy supply facilities in the area include Tulocay Substation, Basalt Substation, and Highway Substation in American Canyon (which will be reinforced within a few years). Electrical supply in the Stanly Ranch vicinity is presently at capacity. However, PG&E commonly redistributes electricity from its energy supply facilities to accommodate increases in demand and changes in energy loading. Development of an additional facility, Parkway Substation in Vallejo, will most likely be completed by the year 2000. The energy distribution schedule of this facility will coincide with plans for phased development of Stanly Ranch (Fallon, 1997).

The project site is currently served by telecommunications lines, with service provided by Pacific Bell. Existing communications lines only have the capacity to serve a few structures. New fiberoptic cables would need to be installed to accommodate the increase in demand from the proposed development. The main connection for the lines lies northwest of the center of the site, in close proximity to SR 29/12.

## **2. Impacts and Mitigation Measures**

### **a. Significance Criteria.**

(1) Water Supply. A significant impact would occur if new development, authorized by adoption of the *Draft SRSP*, increased water demand that exceeded the available existing or planned supply of the City of Napa Water System.

(2) Wastewater. A significant impact would occur if new development authorized by the *Draft SRSP* generated wastewater flows that exceeded the existing or planned wastewater treatment, storage, and disposal capacity of the NSD.

(3) Gas, Electric and Telecommunications Services. For this EIR, a significant impact would occur if the proposed project would:

- Substantially increase reliance on natural gas and oil, or substantially decrease reliance on renewable energy sources, thereby resulting in wasteful, inefficient, and unnecessary consumption of energy;
- Have an adverse effect on local and regional energy supplies and/or on requirements for additional capacity;
- Increase the demand for telecommunication services beyond current capacity;



- Result in undergrounding of utility lines that could have biological or cultural resource impacts; or
- Potentially interfere with electrical service due to construction activities.

b. Less Than Significant Impacts. The following has been determined to be a less-than-significant impact.

***Impact UTIL-A: Development of Stanly Ranch would increase demand on power and gas services and telecommunications services. (LTS)***

To conserve energy, buildings on the site would be oriented to attain maximum solar benefit for both heating and cooling. To allow for the maximum solar gain in winter, windows would be oriented in a south-facing position as often as possible, according to the applicant. Windows would be placed to take advantage of the morning sun to warm up the house, avoiding floor to ceiling glass which can cause excessive heat build-up. To avoid solar gain in summer, minimal glazing would face east and west, and overhangs would be applied to the building. Overhangs of at least two feet on the east and west facades (and deeper on the south) would be recommended.

The location and type of trees would be used as a means of blocking and filtering the sun's rays. Where possible, deciduous trees would be placed on the south elevations where the winter sun is lower in the sky. This would allow for shade in the summer while aiding in solar gain by allowing light to pass through in the winter. In addition, each of the homes would be designed and built in compliance with Title 24 (per State law) to ensure energy conservation.

Condition of Approval UTIL-A: To minimize energy use, project developers shall include proposed energy conservation measures in site design. These measures shall be verified at the time of tentative map approval and building permit issuance. (LTS)

c. Significant Impacts. The following impacts have been determined to be significant.

***Impact UTIL-1: The proposed project would increase the City of Napa's water supply deficit during drought conditions if the project's proposed water savings plan were not fully implemented or completely effective. (S)***

The applicant's projection of the total (potable and nonpotable) estimated average daily water demand for the proposed project is about 0.68 mgd (Table IV.K-2). The total estimated average daily potable water demand (ADPWD) is about 0.28 mgd.

The City of Napa water system currently provides an average of 0.019 mgd potable water to the project site. The additional potable water demand for the project would be supplied by the City of Napa water system. Reclaimed water is proposed to be used for the remaining total estimated average water demand of 0.40 mgd. The proposed distribution network would include a dual loop water delivery system (minimum of two connection points) which would connect to the existing City-owned, 36-inch main. The main is located south of and parallel to Highway 29/12 (see Figure III-17).

Reclaimed water would be used to irrigate the neighborhood parks, resort open space, golf course, wine center open space, major street landscaping, fire station landscaping, vineyards and landscape buffers, and storm drain treatment ponds (Ruggeri-Jensen Azar & Associates, 1998). Reclaimed water would be obtained for the project from the proposed NSD reclaimed water distribution main. The proposed main would transport reclaimed water from the NSD wastewater treatment plant located across the Napa River to the project site. If the NSD proposed main were not constructed by NSD before project construction, the project would include the construction of the reclaimed water main on behalf of NSD. Adequate quantities of reclaimed water are available to serve the site.

NSD is planning for additional reclaimed water receiver sites and Stanly Ranch is one of the sites listed in their plan. NSD has obtained the necessary permit for the reclaimed water pipeline under the river. Additionally, reclaimed water sites do not need to be within the District (Stewart, 1998). Reclaimed water may also be available from an on-site wastewater treatment facility, if this alternative were to be constructed.<sup>5</sup>

The applicant proposes to generate sufficient water savings to completely offset the project's additional ADPWD (i.e., additional potable water demand beyond the current ADPWD from the project site) on the City of Napa water system. The water savings plan includes: 1) the use of on-site, water-saving devices, 2) retrofit of existing homes within the City of Napa, as required by the City of Napa Retrofit Program for New Development, and 3) voluntary retrofit of additional existing homes within the City of Napa.

The estimated ADPWD for the project would be reduced by about 0.048 mgd through the use of on-site, water-saving devices (i.e., ultra-low flow toilets and shower heads) (Table IV.K-2). The applicant would provide approximately 0.207 mgd of potable water savings by conducting 3,305 retrofits to existing homes in the

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<sup>5</sup> An evaluation of the on-site treatment facility is provided in Chapter V.C. and discusses the use of reclaimed water.

**Table IV.K-2**  
**ESTIMATED AVERAGE WATER DEMAND**  
**STANLY RANCH DEVELOPMENT**  
**(mgd)**

	<b>Water Demand/ Savings (mgd)</b>
Total Estimated Average Daily Water Demand	0.68
Average Daily Reclaimed Water Demand	0.40
Average Daily Potable Water Demand (ADPWD)	0.28
Existing On-site ADPWD	<0.019>
Net additional ADPWD <u>without</u> implementation of water savings (i.e., ADPWD beyond existing on-site ADPWD)	0.26
<u>On-site</u> Potable Water Savings/Reduction through use of water saving devices	<0.048>
<u>Off-site</u> Potable Water Savings through City Retrofit Program	<0.207>
<u>Off-site</u> Potable Water Savings through voluntary retrofits	<0.021>
Net Additional ADPWD with implementation of water savings	<0.016> <sup>a</sup>

Notes: mgd = million gallons per day  
<xx> = reflects proposed water savings or reflects existing ADPWD.

<sup>a</sup> Reflects an ADPWD reduction to the City of Napa water system.

Source: Ruggeri-Jensen-Azar & Associates, Stanly Ranch Estimated Overall Water Demand, March 1998 and 15 April 1998. See Appendix L for additional detail.

City as required by City's Retrofit Program for New Development.<sup>6</sup> The applicant would provide another 0.021 mgd of water savings by voluntarily conducting an additional 336 retrofits to existing homes. As a result of the on-site water saving devices and off-site retrofits, the project would not result in a net increase in ADPWD within the City of Napa; the project would actually decrease the citywide ADPWD by 0.016 mgd (Table IV.K-2). As of May, 1998, there were more than 11,900 City retrofits available (Brun, 1998).

The City's average water demand projections for existing land uses at the project site and development of Stanly Ranch were estimated to be about 0.23 mgd, which is equivalent to the ADPWD estimated by the applicant (0.23 mgd) if on-site water saving devices were used (Table IV.K-2).<sup>7</sup> Additional water conservation measures

<sup>6</sup> The minimum number of retrofits required for the project was determined by Phil Brun, Civil Engineer, City of Napa Water Department (Brun, 1998).

<sup>7</sup> The Applicant's ADPWD of 0.23 mgd reflects the total ADPWD for the project, 0.28 mgd, less the water savings from use of on-site water saving devices, 0.048 mgd.



for the project could be implemented to further reduce the project's ADPWD, such as the installation of drought tolerant landscaping; however, most of the project's nonresidential landscaping is proposed to be watered by reclaimed water. (City Ordinance 092-010 and water efficient landscape guidelines require water efficient landscaping for multi-family and nonresidential project landscaping.)

Project development is expected to begin by 2000; the project would be constructed in phases, over a period of about ten years. The City's 1995 estimated water deficit of 2,500 acre-feet, during drought conditions, is expected to steadily decrease in future years due to the gradual increase of the SWP entitlement from the NBA system; the deficit is expected to ultimately disappear by 2012 (West Yost & Associates et al., 1997), about two years after the proposed project is fully developed. As shown in Table IV.K-1, the projected annual water demand for the City in 2000 is 11,600 acre-feet under drought conditions;<sup>8</sup> the projected water supply is 9,400 acre-feet firm yield under drought conditions.<sup>9</sup> Based on these values, a deficit of about 2,200 acre-feet (2.0 mgd) would result during drought conditions in 2000 (Table IV.K-1).

The projected annual water demand for the City in 2010, the projected horizon year of the proposed project, is 12,100 acre-feet under drought conditions. The projected 2010 water supply is 11,800 acre-feet firm yield under drought conditions (Table IV.K-1). Based on these values, the deficit would decrease to about 300 acre-feet (0.27 mgd) in 2010 during drought conditions (West Yost & Associates et al., 1997). Both the 2000 and 2010 projected deficits assume that the scheduled development projected in the *Draft General Plan*, which includes Stanly Ranch proposed development, would occur.

The City is currently attempting to resolve the drought year water deficit by applying to the State to accelerate the incremental increase in the City's SWP entitlement. However, if the City cannot secure an additional permanent surface water supply source, the City may not be able to provide the full amount of water projected for the project under drought conditions, even with full implementation of on-site water saving devices and off-site retrofits as discussed above. On the other hand, the City may be able to meet the project's demand under drought conditions under any one of the following scenarios: 1) the growth anticipated by the City is slower than projected over the construction period of the proposed project, 2) the projected water

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<sup>8</sup> The drought year demand is based on a reduction of 20 percent to reflect City demand management program implementation. The City has previously achieved up to 33 percent reduction during previous drought conditions (West Yost & Associates, et al., 1997).

<sup>9</sup> During drought conditions, the firm yield reflects 400 and 5,000 acre-feet from Milliken Creek and Lake Hennessey Reservoirs, respectively, and 50 percent of the scheduled SWP entitlement from the NBA system (West Yost & Associates, et al., 1997).

demands associated with other future developments are offset through measures similar to those proposed for Stanly Ranch, or 3) NSD reclaimed water can be used to satisfy a portion of the potable water demand.

Mitigation Measure UTIL-1: The following combination of mitigation measures shall be implemented:

- (a) Policy 1.9 of the *Draft SRSP* shall be revised, prior to adoption of the *Final SRSP*, to require the use of reclaimed water for irrigation of the neighborhood parks, resort open space, golf course, wine center open space, major street landscaping, fire station landscaping, vineyards and landscape buffers, and storm drain treatment ponds.
- (b) In accordance with the *Draft General Plan*, Community Service Element Policy CS-9.3, the applicant shall obtain an "approval letter" from the City of Napa Department of Public Works prior to obtaining a building permit, final subdivision map, or similar ministerial entitlements, stating that the project would not adversely affect the City's ability to adequately serve the public health and safety needs of all of its water customers during drought conditions and that there will be sufficient water to serve the basic health, hygiene and fire suppression needs of the community. The City shall issue the letter(s) of approval only for those portions of the proposed project for which the City can guarantee water supply specifically during drought conditions.
- (c) The Implementation Program for the *Draft SRSP* shall be amended to include the requirements for obtaining an approval letter for water supply from the City of Napa Department of Public Works.
- (d) Water Policy 1.8 of the *Draft SRSP* shall be revised, prior to adoption, to require the implementation of water conservation measures (versus support of water conservation measures). The projected average daily potable water demand, as shown in existing Table 9 of the *Draft SRSP*, shall be revised to reflect the implementation of water conservation measures. In addition, the Implementation Program of the *Draft SRSP* shall be revised to include a Water Conservation Program which shall discuss methods for implementing water conservation measures to comply with Policy 1.8 of the *Draft SRSP*. Water conservation measures shall include the use of water saving devices (e.g., toilets, shower heads, and appliances) in all new construction; at a minimum, all faucets in sinks and lavatories shall be equipped with faucet aerators designed to limit the maximum flow to 2.2 gallons per minute

(gpm); all shower heads shall be designed to limit the maximum flow to 2.5 gpm.

Water conservation measures shall also include installation of drought tolerant landscaping in accordance with the California Water Conservation and Landscaping Act. The applicant shall submit to and receive approval from the Planning Department of a Landscape and Irrigation Plan designed and signed by a licensed landscape architect or landscape contractor prior to the issuance of a building permit for the nonresidential lots, or approval of a final or parcel map. The Plan shall conform to the City of Napa's Water Efficient Landscape Guidelines.

- (e) Policy 1.8 of the *Draft SRSP* shall also be revised prior to adoption to require the retrofit of existing homes within the City of Napa, as proposed by the applicant. The projected average daily potable water demand, as shown in existing Table 9 of the *Draft SRSP*, shall be revised to reflect the projected water savings from implementation of the revised Policy 1.8 of the *Draft SRSP*.
- (f) The Implementation Program shall also be revised prior to adoption of the *Final SRSP* to describe how the project would implement and comply with the above-mentioned policy. The Program shall include requirements to: 1) perform at least the minimum number of retrofits specified by the City Water Department, pursuant to the City's Retrofit Program for New Development; 2) perform additional voluntary retrofits necessary to prevent an increase to the City's average daily potable water demand (ADPWD); and 3) monitor the implementation of retrofits prior to occupancy of new buildings to ensure that the potable water demand from the City of Napa water system (e.g., demand beyond existing water use on the property) would be completely offset through implementation of (d) and (e) above.
- (g) In addition to the above water mitigation measures, the following standard City mitigation measures shall apply:
  - 1. The applicant shall:
    - Install or execute the City's Installation Agreement, including appropriate security, for the landscaping and irrigation.
    - Prior to initial occupancy and the release of installation security, the licensed professional who signed the final landscape and irrigation plans shall certify in writing that



he or she has inspected and approved the installation of the landscaping and irrigation and found them to be consistent with the approved plan and that the systems are in working order.

- Prior to occupancy, the applicant shall execute and record the City's Landscape Maintenance Agreement.
2. The project shall connect to the City of Napa water system. Any existing well must be properly protected from potential contamination. If an existing well is to be destroyed, a well destruction permit must be obtained from the Napa County Department of Environmental Management by a licensed well driller. If an existing well is not destroyed, it must be properly protected and an approved backflow prevention device installed according to the Water Division's specifications.
  3. Prior to trenching within existing roadway areas, the Developer's engineer shall ascertain the location of all underground utility systems and shall design any proposed subsurface utility extensions to avoid disrupting the services of such systems. (LTS)

**Impact UTIL-2: The proposed project would exacerbate the existing overloaded conditions experienced at the Napa Sanitation District (NSD) wastewater treatment plant during wet weather periods. (S)**

Policy 1.5 of the *Draft SRSP* states that wastewater generated from the project would be discharged to the NSD for treatment and disposal. At full development, estimated to be year 2010, the projected average daily wastewater generated would be approximately 0.28 mgd.<sup>10</sup> The NSD facility currently does not have the capacity for existing wastewater flows during the winter months; additional flows would worsen the conditions.

The applicant proposes to completely offset the wastewater generated by the project through use of on-site water saving devices and retrofit of existing homes within the City of Napa. The project's wastewater flows would be reduced by 0.048 mgd through the use of on-site water saving devices. The project would also reduce the wastewater generated by existing off-site homes in the City of Napa by 0.23 mgd

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<sup>10</sup> The projected average daily wastewater generated and discharged to the NSD conservatively includes a ten percent increase in flow to account for infiltration/inflow. However, the new wastewater collection system at Stanly Ranch would result in minimal to no new infiltration/inflow, as newly constructed portions of the collection system are relatively "water tight".

through compliance with the City of Napa Retrofit Program for New Development (3,305 retrofits) and additional voluntary off-site retrofits (336 retrofits). As a result, the estimated wastewater generated from the project would be completely offset (Table IV.K-3).

The 1990 NSD Master Plan provides for upgrading facilities to serve the projected growth demands identified in the City's *Draft General Plan*, which includes the project. Implementation of the NSD Master Plan has begun.<sup>11</sup> However, until recommendations in the Master Plan have been constructed, it is not completely certain whether NSD would have available capacity to serve the project.

The City will require applicant to obtain a "will-serve" letter from NSD prior to the issuance of a building permit or similar ministerial entitlements, to ensure that wastewater flows from new development do not exceed NSD's capacity; the "will-serve" letter is required only in the event that the NSD plant is operating at critical capacity (City of Napa, 1997b).

The project is currently outside the boundaries of NSD's sphere of influence. An application to expand the NSD sphere of influence to include the project site must be submitted and processed by the appropriate Local Agency Formation Commission (LAFCO). In addition, the project area must also be annexed to NSD in order for the project to connect to the NSD system. The potential impacts of expanding NSD's sphere of influence are discussed in Chapter VI, under Growth Inducement.

Connecting to NSD would require construction of a sanitary sewer pump station and force main to access existing NSD facilities across the Napa River from the project site. However, NSD typically does not allow the construction of additional sanitary sewer pump stations within their collection system. The NSD Board of Directors would need to approve the proposed pump station prior to or concurrent with annexation of the project site to the NSD system (NSD, 1997).

Mitigation Measure UTIL-2: The following six-part mitigation measure (a through f) shall be implemented:

- (a) The discussion under Napa County LAFCO in the *Draft SRSP* shall be rewritten, prior to adoption of the *Final SRSP*, to indicate: 1) the project is not within the sphere of influence of the NSD; and 2) the responsibilities of the applicant in coordinating with the NSD in

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<sup>11</sup> The preliminary design stages for increased NSD plant capacity were approved by the NSD Board of Directors in 1997. The Phase 2 construction contract to expand treatment capacity was awarded in July, 1998, and is scheduled for completion in November, 2000.

**Table IV.K-3**  
**ESTIMATED DAILY WASTEWATER FLOWS**  
**STANLY RANCH DEVELOPMENT**

	Wastewater Flow (mgd)
Total Estimated Daily Wastewater Flow	0.28
On-Site Daily Wastewater Flow Reduction from use of water saving devices	<0.05>
Off-Site Daily Wastewater Flow Reduction from implementation of City Retrofit Program and additional voluntary retrofits	<0.23>
Net Estimated Increase in Daily Wastewater Flow	<0.00>

Notes: mgd = million gallons per day  
<xx> = reflects wastewater flow reduction to NSD facility

Source: Ruggeri-Jensen-Azar and Associates, March 1998.

requesting a sphere-of-influence amendment and annexation from LAFCO.

The applicant shall assist NSD in formally requesting from LAFCO a sphere-of-influence amendment to include the project site and an annexation of the project site into NSD. The request shall be approved prior to the approval of a Tentative Map for the entire site or other similar approval per the development agreement for the project.

If the request for annexation to NSD were not approved at that time, the applicant would be required to implement an approved alternative method for providing wastewater treatment and disposal, such as building an on-site wastewater treatment facility. Both alternatives shall be covered in the *Draft SRSP* equally prior to adoption.

- (b) A “will-serve” letter from the NSD shall be obtained for the entire project prior to the receipt of the tentative map approval or similar entitlement identified in the Development Agreement if the NSD is operating under critical capacity and/or if it is warranted by the City. Such a letter may only be provided if the proposed expansion of the NSD facilities is scheduled to be completed before wastewater is generated by the proposed project. In the event that a “will-serve” letter is not issued, the proposed alternative for wastewater service shall be implemented; this alternative is further discussed in Chapter V.D of this EIR. The Implementation Program for the *Draft SRSP*



shall be amended to include the requirement for obtaining a “will-serve” letter from NSD.

- (c) A discussion shall be included in the *Draft SRSP* requiring that the applicant receive sanitary sewer infrastructure design approval from the NSD before connecting to the NSD trunk main. This discussion shall be included in the Implementation Program, Financing and Construction of Project Infrastructure section of the *Draft SRSP*.
- (d) The discussion about sanitary sewers in the *Draft SRSP* shall be corrected to acknowledge that the NSD facility currently does not have the capacity to accept additional wastewater generated from new development.
- (e) Revised Policy 1.8 addressed in Mitigation Measure UTIL-1(d) and (e), shall also state that the project shall retrofit existing homes with water-saving devices to assure there is no net increase in wastewater loading to the NSD facility. The estimated average daily sewer flows, as shown in existing Table 8 of the *Draft SRSP*, shall be revised to reflect the projected wastewater flow reduction from implementation of Mitigation Measure UTIL-1(d) and (e).

The Implementation Program shall also be revised prior to adoption of the *Final SRSP* to describe how the project would demonstrate the effectiveness of the on-site water saving devices and off-site retrofits (e.g., monitoring the implementation retrofits in relationship with new on-site fixtures installed) to ensure that the project's estimated wastewater generation flow would be completely offset with the implementation of required and voluntary water saving measures described in Mitigation Measure UTIL-1 (d) and (e).

- (f) In addition to the above measures, the following standard City mitigation measure shall apply:
  - 1. Any needed existing septic systems, setbacks and reserve areas must be protected and maintained during cleaning, grading, construction. After connection to a wastewater treatment system, any existing septic tanks shall be properly destroyed.  
(LTS)

**Impact UTIL-3: Reclaimed water application may adversely impact public health and environment if inadequately treated or inappropriately applied. (S)**

Reclaimed water would be used to irrigate the neighborhood parks, resort open space, golf course, wine center open space, major street landscaping, fire station landscaping, vineyards and landscape buffers, and storm drain treatment ponds. The estimated average demand to irrigate these areas is about 0.4 mgd (see Table IV.K-2). Although the use of reclaimed wastewater would aid in conserving water resources, its use could potentially adversely impact public health and the environment if the reclaimed water were inadequately treated or inappropriately applied. The California Department of Health Services, Office of Drinking Water (DHS), and the Regional Water Quality Control Board (RWQCB) have established requirements for wastewater spray disposal to protect public health and the environment. Title 22, California Code of Regulations (CCR), Section 60301, et seq. contains treatment and application requirements for reclaimed wastewater. The regulations include standards or specifications for treatment processes for water quality, system reliability, optimal storage capacity, management of reclaimed water, setback, and irrigation. These requirements would need to be satisfied by both the NSD and the project to ensure that the use of reclaimed water by the project would not cause degradation of any water supply and would not cause pollution or nuisance conditions.

Mitigation Measure UTIL-3: Compliance with existing regulatory requirements for treatment and application of reclaimed water would reduce this potential impact to less than significant. However, the Implementation Program of the *Draft SRSP* shall describe how the regulatory requirements would be satisfied prior to adoption of the *Final SRSP*. (LTS)

**Impact UTIL-4: Project development may interfere with PG&E's requirements for operation and maintenance of gas and electric facilities. (S)**

After review of the proposed development maps, PG&E expressed concern over the location of facilities and potential conflicts with the site design. The main gas line (on the southerly portion of the site) is located within an easement that was granted by virtue of a deed to PG&E. The current design of Subdivision "D" has the gas line crossing diagonally across various lots, including Neighborhood 4. Because PG&E requires access to maintain their facilities, they would require that this subdivision be redesigned to have the gas line run through open areas. The golfing green is also located within the above-mentioned PG&E easement. Although the green lies directly on top of the existing gas line, PG&E reserves the right to properly maintain its facility, which could result in future inconveniences on the golf course. The proposed golf course should also not cross existing overhead transmission line(s) to eliminate the possibility of golf balls being hit into conductors or insulators. PG&E also suggests that deep-rooted trees or shrubs not be planted over existing gas lines and that no trees which may grow in excess of 20 feet at maturity be planted under overhead transmission or distribution lines.

Any relocation of a PG&E facility necessitated by the project would be at the developer's expense. Because of the significant cost involved with relocating a major gas main, PG&E has suggested that the developer leave the existing lines in place and refrain from building permanent structures near the easement to allow for future access in the event that maintenance or repair is required.

Mitigation Measure UTIL-4: The project applicant shall work with PG&E to develop the site in a manner which allows for safe and efficient operation and future maintenance of gas and electric facilities. Compliance with PG&E's recommendations shall be verified prior to approval of tentative subdivision maps. (LTS)





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## L. NOISE

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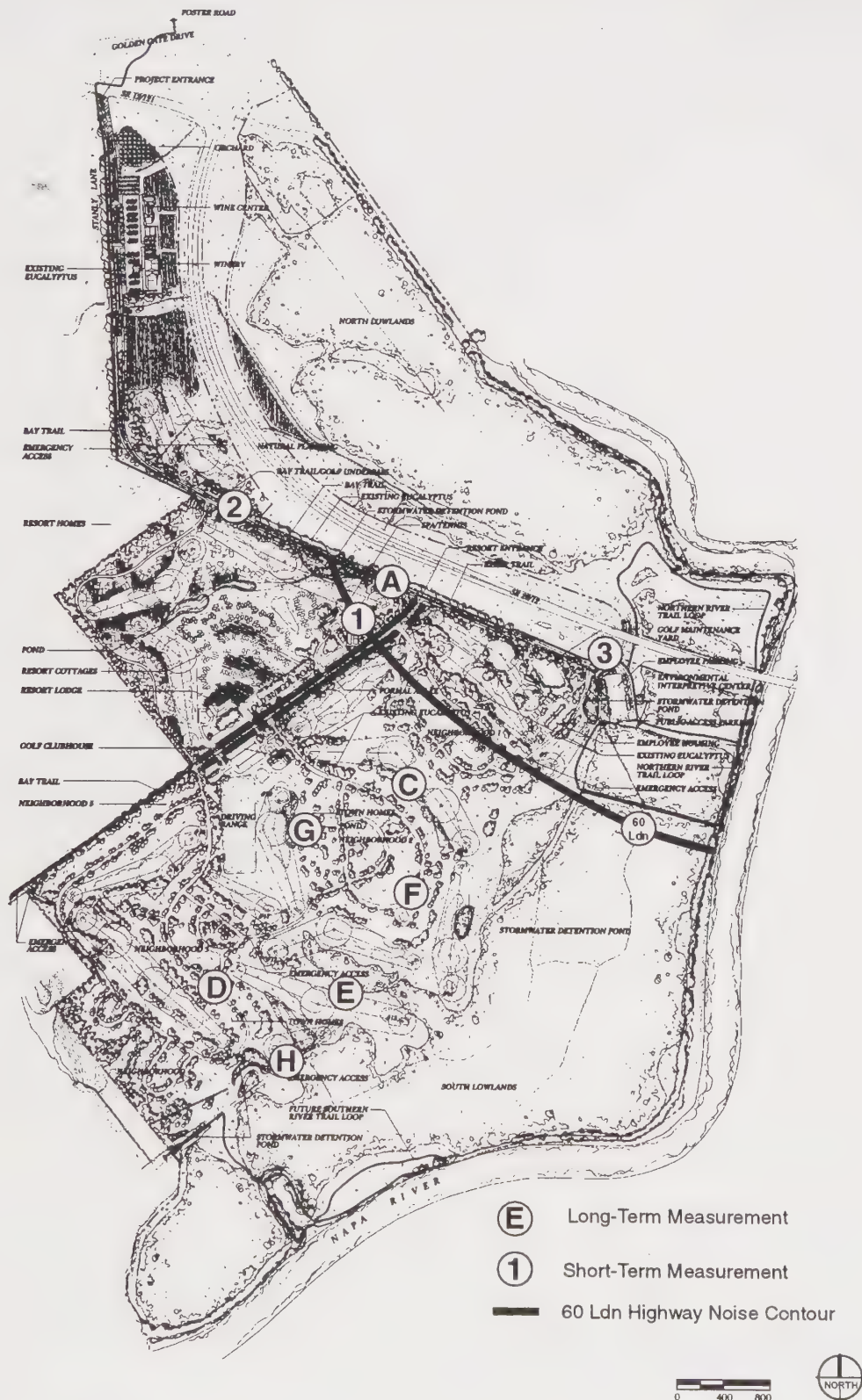
This section evaluates the noise impacts associated with implementation of the *Draft SRSP*. The existing and future noise exposure of the site is described; the compatibility of the proposed land uses with the on-site noise environment is evaluated; and the potential for off-site noise impacts is quantified.

1. <b>Setting</b>
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a.     Existing Conditions. The Stanly Ranch site is exposed to noise emanating from State Route 29/12, State Route 12/121, and aircraft overflight associated with activity from the Napa County Airport, located about 4,000 feet south of the *Draft SRSP* area. A detailed noise measurement survey was conducted on the site in February 1991 (ROMA, 1993a). These noise measurements were updated in 1993 and again in 1997 for this EIR. The noise measurements consisted of eight long-term measurements and three short-term measurements on the site. The noise measurement locations are shown on Figure IV.L-1. The measurement locations denoted with letters are the long-term measurements and the numbered locations are locations where short-term measurements were conducted. The advantage of conducting a long-term measurement is that it allows a direct measurement of the 24-hour day/night average noise level ( $L_{dn}$ ) and the advantage of the short-term measurement is that an operator with a meter can write down the noise levels of individual events to allow, for example, aircraft noise levels to be separated from traffic noise levels. (Appendix H includes a discussion of terminology and fundamental concepts of environmental noise.)

The results of the measurements are summarized in Table IV.L-1. The data show that noise levels are highest near State Route 29/12. Traffic noise from State Route 29/12 penetrates furthest into the site at the easterly end where the roadway is elevated crossing the Napa River. The location of the existing 60  $L_{dn}$  contour, based on the noise measurement data, is shown on Figure IV.L-1.

In the southern portions of the site, noise levels are dominated by aircraft flyovers. Noise measurements conducted at Sites F, G and H in November 1997 were done



# STANLEY RANCH

## SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT

Figure IV.L-1  
Noise Measurement Locations

BRADY ■ LSA  
PLANNERS AND LANDSCAPE ARCHITECTS



**Table IV.L-1**  
**EXISTING DAY/NIGHT SOUND LEVEL ( $L_{dn}$ )**  
**ON THE STANLY RANCH PROPERTY**

Site	Time and Date	$L_{dn}$ <sup>a</sup>
A	2 pm, 2/10/91 to 12 pm, 2/13/91	69 dB
B	3 pm, 2/10/91 to 12 pm, 2/12/91	53 dB
C	2 pm, 2/12/91 to 11 am, 2/13/91	58 dB
D	2 pm, 2/10/91 to 12 pm, 2/13/91	50 dB
E	2:40 pm, 2/11/91 to 11 am, 2/12/91	53 dB
F	10 am, 11/20/97 to 2 pm, 11/22/97	51 dB
G	11 am, 11/20/97 to 2 pm, 11/22/97	56 dB
H	12 pm, 11/20/97 to 3 pm, 11/22/97	51 dB
1	1:50-2:00 pm, 2/10/91	60 dB
2	1:36-1:51 pm, 10/14/97	53 dB
3	1:04-1:19 pm, 10/14/97	63 dB

<sup>a</sup>  $L_{dn}$  established based on comparison of short-term measurement results with long-term measurement results.

Source: Illingworth & Rodkin, 1997 and ROMA, 1993a.

specifically to separate the contribution of aircraft flyover noise from the noise generated by traffic and other activity in the area. Noise measurements at these three locations were done in a manner that enabled individual events to be captured along with the overall level. Noise measurements were conducted for a period of about 52 hours at each of these locations running from early on Thursday morning, November 20, 1997, through Saturday afternoon, November 22, 1997, between storm systems. Over the course of the measurement period, 155 aircraft flyovers occurred. The highest aircraft noise levels measured on the site were attributable to the aircraft used by the airline training school. These are the A-36 Bonanza and the King Air C 90. The noise level output of the A-36 Bonanza is typically 3 decibels noisier than the King Air C 90. The noise levels generated by these aircraft as they flew over the site ranged from 65 to 75 dBA. The 24-hour average noise level ( $L_{dn}$ ) at these three locations attributable to aircraft flyovers was 45 to 46 dB. The Community Noise Equivalent Level (CNEL) (the noise metric used by the Airport Land Use Commission to evaluate aircraft noise) was 46 to 47 dB. The overall  $L_{dn}$ <sup>1</sup> at Site F was 51 dB; at Site G it was 56 dB; and at Site H it was 51 dB. The noise levels at Site F were dominated by traffic on State Route 29/12. The meter at Site F was located behind a large tree trunk to shield it as much as possible from highway noise.

<sup>1</sup> Overall  $L_{dn}$  includes aircraft noise in combination with other sources of noise.

The measured  $L_{dn}$  for aircraft activity of 45 to 46 dB is consistent with the published noise contours for the Napa County Airport (see Figure IV.L-2 which shows that the site is well outside the projected year 2008 CNEL 55 contour for the airport).<sup>2</sup>

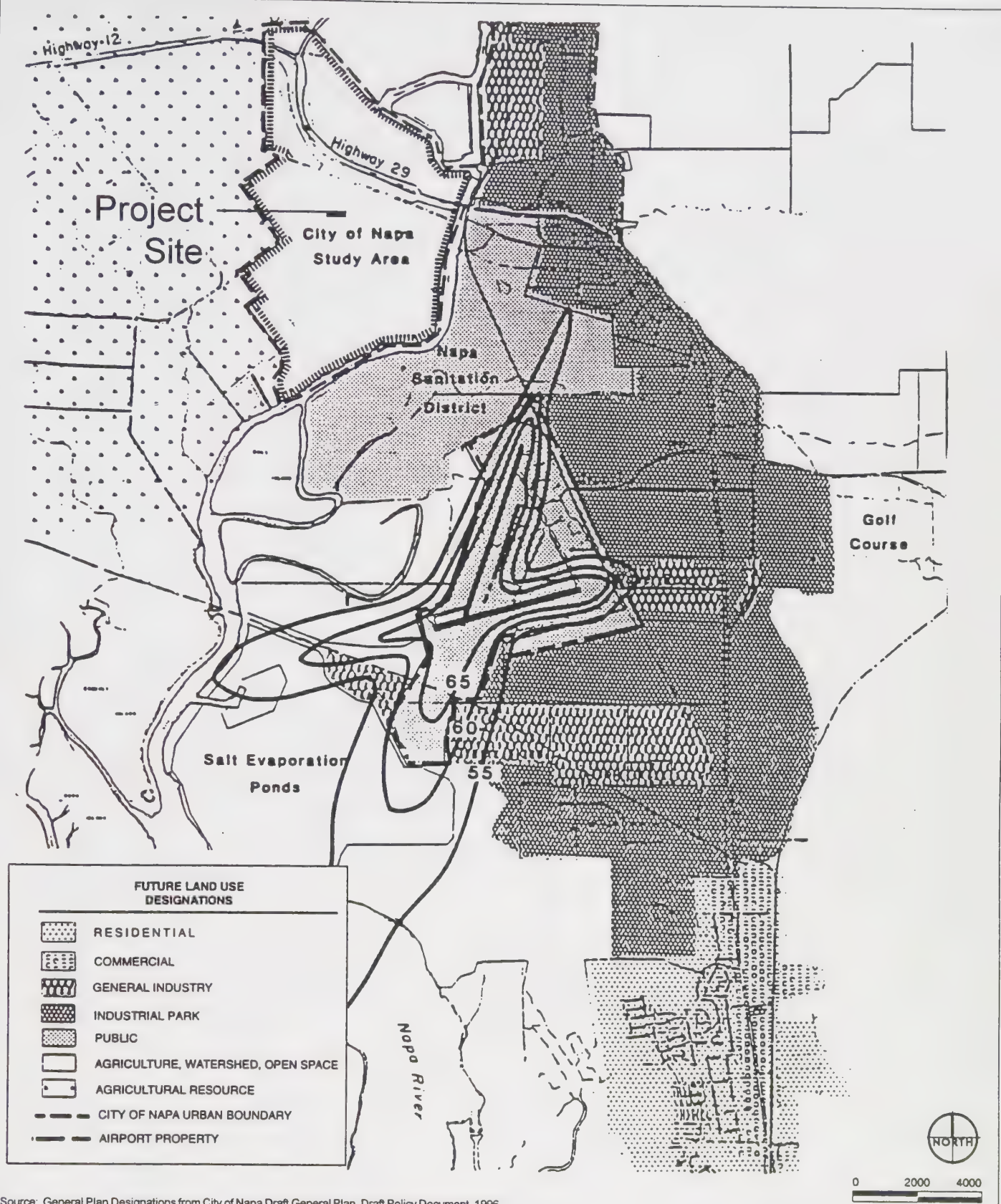
Aircraft activity tends to be confined to the daytime hours. The distribution of the aircraft flyover activity from midnight on Thursday, November 20, 1997 through midnight on Friday, November 21, 1997 is shown in Figure IV.L-3. During this 24-hour period, there were 78 identifiable aircraft flyovers on the site. Only two flyovers occurred between the hours of 10 PM and 7 AM, and these took place between 6 and 7 AM on Friday morning, November 21, 1997. Since this flight path is primarily used by the airline training center and their activity is confined to the daytime hours, this timing reduces the potential for nighttime noise disturbances at the project site and is a major reason why the  $L_{dn}$ , which is weighted significantly by nighttime activity, is low. This fact is confirmed by the Airport Master Plan (Napa County, 1991) which indicates that less than one percent of takeoffs and landings at Napa Airport occur between 10 PM and 7 AM.

The 78 operations counted on Thursday through Friday generated an  $L_{dn}$  of 45 dB and a CNEL of 46. The activity level for 1997 is 148,250 operations a year (Shutt Moen, 1997). Based on the frequency of use of the various flight tracks at Napa Airport, this is equivalent to 103 flights/day over the Stanly Ranch site. On the days of the measurements, the number of aircraft was slightly less than a typical day. This difference is equivalent to a 1.2 dB difference in the  $L_{dn}$  and CNEL. Therefore, based on the current annual average operations, the aircraft-generated  $L_{dn}$  on the site would be 47 dB and the CNEL would be 48 dB. The historical high point in operations was in 1994 when there were 231,000 operations per year. In 1994, about 161 overflights of the project site would have occurred which would result in an  $L_{dn}$  (or CNEL) 3.1 dB higher than measured in 1997, or an  $L_{dn}$  of 49 dB and a CNEL of 50 dB. By way of comparison, the number of operations could increase to 600 overflights at the project site per day before reaching a CNEL of 55 dB. This would be equivalent to about 861,000 operations at the airport per year. There has never been a projection that activity could reach this volume at Napa Airport. The current capacity of the airport is 270,000 operations per year and the forecast capacity with all planned airport improvements is 390,000 operations per year (Napa County, 1991). Therefore, it is safe to say that the CNEL on the site related to aircraft noise will remain below 55 dB and will probably remain below 50 dB.

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<sup>2</sup> Site G includes highway noise as well as aircraft noise. Without highway noise, Site G would be under the projected 55  $L_{dn}$  for the airport. Aircraft alone would be 45 to 46  $L_{dn}$ .





Source: General Plan Designations from City of Napa Draft General Plan, Draft Policy Document, 1996.

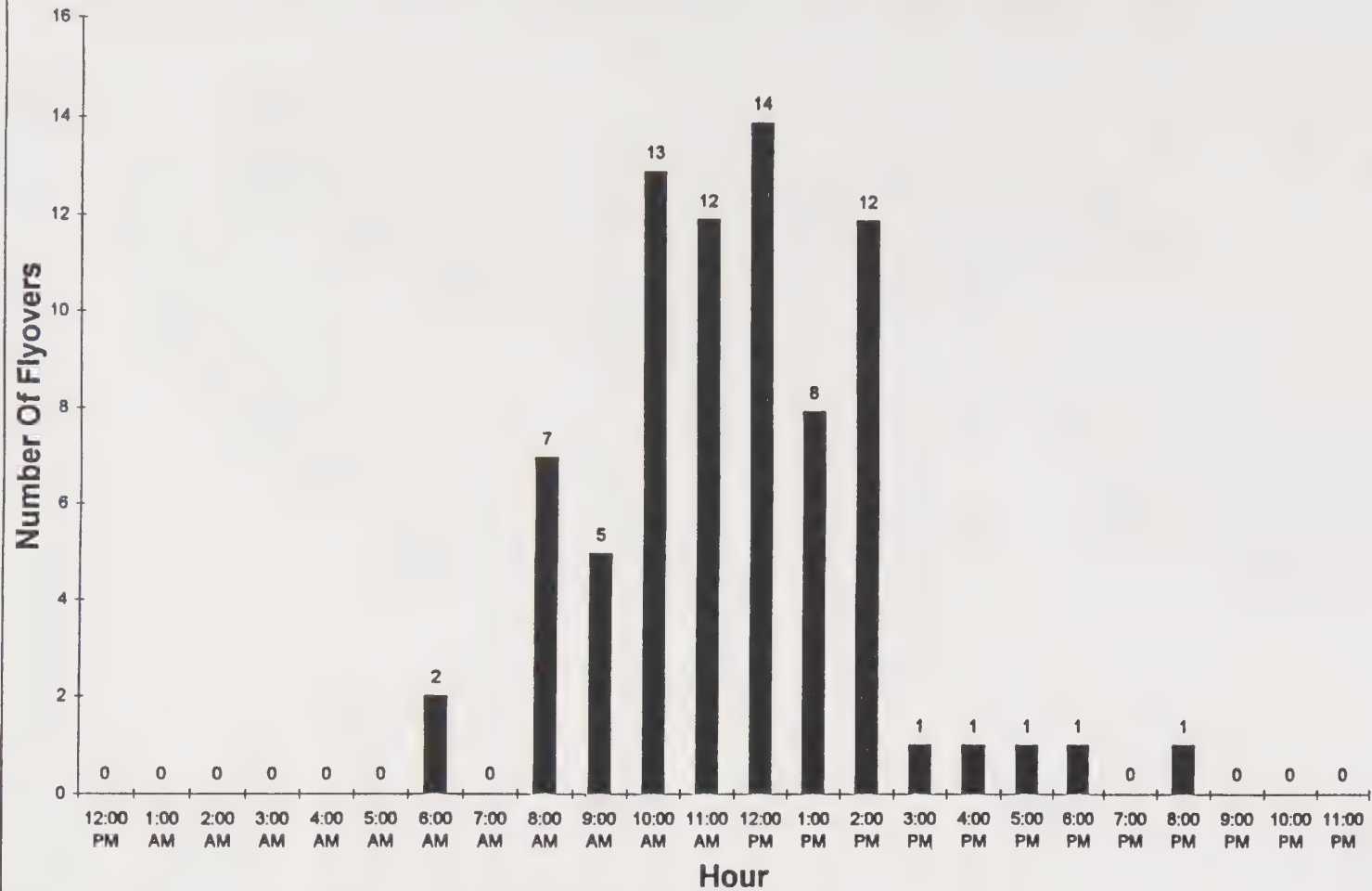
# STANLY RANCH

## SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT

Figure IV.L-2  
Projected 2008 CNEL Noise Levels



**Distribution Of Flyovers At Site \* By Time Of Day**  
**From Midnight, Thursday, Nov. 20, 1997 To Midnight Friday Nov. 21, 1997**



\* Site 3 location is shown in Figure IV. L-1

SOURCE: ILLINGWORTH & RODKIN 1997.

## S T A N L Y   R A N C H

SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT

**Figure IV. L-3**  
**Distribution of Flyovers of Site 3 by Time of Day**

b. Regulatory Background. The City of Napa, through the Noise Element of the City's adopted *General Plan*, has the following goals and policies applicable to this project:

Goals

- Reduce the noise from traffic, through proper circulation and development planning, to a level that does not jeopardize public health, safety and welfare.
- Minimize noise impacts from possible future noise sources.

Policy

- *Noise sensitive uses, including residences, schools, hospitals, nursing homes, etc., should be located away from major noise sources unless significant mitigation steps are taken. Mitigation measures shall include noise barriers, walls or fences along busy streets, proper structural design, adequate setback, etc.*

Additionally, the Noise Element contains noise and land use compatibility guidelines for determining the acceptable noise level for noise sensitive uses. This chart is reproduced as Figure IV.L-4. Residential development is considered normally acceptable with an exterior  $L_{dn}$  of up to 60 dB. Normally acceptable is defined as meaning the specified land use is satisfactory assuming buildings are of conventional construction without special noise insulation. Between an  $L_{dn}$  of 60 and 70 dB, residential development is considered conditionally acceptable. This means that a detailed analysis shall be required for all construction and that noise insulation features shall be included in the building design. Generally, conventional construction will suffice but requires closed windows and fresh air supply systems or air conditioning. The text states for an  $L_{dn}$ /CNEL of 65 dB or greater, residential and commercial uses which give emphasis to outdoor activity should be discouraged.

The *Draft General Plan* uses a land use compatibility chart essentially the same as that in the existing *General Plan*, although compatibility categories overlap as shown in Figure IV.L-5. *Draft General Plan* policies state that new residential development is to meet exterior noise level standards in the table, which provides a "conditionally acceptable" range up to 70 dB  $L_{dn}$  for residential uses, although the accompanying text states the upper limit of exterior noise *should* be 60 dB  $L_{dn}$ . Other policies state that the City shall use CEQA to ensure that new development does not exceed City standards; that the development review process shall be used to site new construction in ways that reduce noise levels; that the City shall encourage clustering, where appropriate, of residential development in order to provide open space that can be used to distance residences from noise sources; and that new development shall maintain the ambient sound environment as much as possible.

**Land Use Compatibility for Community Noise Environments**  
**Napa General Plan (1983, Reprinted 1986)**

LAND USE CATEGORY	COMMUNITY NOISE EXPOSURE Ldn OR CNEL, dB					
	55	60	65	70	75	80
Residential – Single Family, Duplex, Mobile Homes, Multi Family						
Transient Lodging – Hotels, Motels						
Schools, Libraries, Churches, Hospitals, Nursing Homes						
Auditoriums, Concert Halls, Amphitheaters						
Sports Arena, Outdoor Spectator Sports						
Playgrounds, Neighborhood Parks						
Golf Courses, Riding Stables, Water Recreation, Cemeteries						
Office Buildings, Business Commercial and Professional						
Industrial, Manufacturing, Utilities, Agriculture						

**LEGEND**

NORMALLY ACCEPTABLE		NORMALLY UNACCEPTABLE	
CONDITIONALLY ACCEPTABLE		CLEARLY UNACCEPTABLE	

**NORMALLY ACCEPTABLE:** Specified land use is satisfactory, assuming buildings are of conventional construction without special noise insulation

**CONDITIONALLY ACCEPTABLE:** Detailed analysis shall be required for all construction and noise insulation features shall be included in building design. Generally, conventional construction will suffice, but with closed windows and fresh air supply systems or air conditioning. This requirement shall be applied, irrespective of any projected decrease in CNEL for the area. Where the CNEL is 65dB or greater, residential and commercial uses which give emphasis to outdoor activity should be discouraged.

**NORMALLY UNACCEPTABLE:** New construction or development should generally be discouraged....

**CLEARLY UNACCEPTABLE:** New construction or development should generally not be permitted.

Source: Illingworth & Rodkin, 1997.

# S T A N L Y R A N C H

## SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT

**Figure IV.L-4**  
**Land Use Compatibility for Community Noise Environment (adopted General Plan)**



**Land Use Compatibility for Community Noise Environments**  
**Draft Napa General Plan (1996 Policy Document)**

LAND USE CATEGORY	COMMUNITY NOISE EXPOSURE					
	Ldn OR CNEL, dB					
	55	60	65	70	75	80
Residential – Low Density Single Family, Duplex, Mobile Homes,						
Residential – Multi Family						
Transient Lodging – Hotels, Motels						
Schools, Libraries, Churches, Hospitals, Nursing Homes						
Auditoriums, Concert Halls, Amphitheaters						
Sports Arena, Outdoor Spectator Sports						
Playgrounds, Neighborhood Parks						
Golf Courses, Riding Stables, Water Recreation, Cemeteries						
Office Buildings, Business Commercial and Professional						
Industrial, Manufacturing, Utilities, Agriculture						

LEGEND	
NORMALLY ACCEPTABLE	NORMALLY UNACCEPTABLE
CONDITIONALLY ACCEPTABLE	CLEARLY UNACCEPTABLE

NORMALLY ACCEPTABLE: Specified land use is satisfactory, assuming buildings are of conventional construction without special noise insulation

CONDITIONALLY ACCEPTABLE: New Construction or development should only be undertaken after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning included in the design.

NORMALLY UNACCEPTABLE: New construction or development should generally be discouraged....

CLEARLY UNACCEPTABLE: New construction or development should generally not be permitted.

Source: Illingworth & Rodkin, 1997.

# STANLY RANCH

## SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT

Figure IV.L-5

Land Use Compatibility for Community Noise Environment (Draft General Plan)

New transportation-related noise sources that cause the ambient sound levels to exceed compatibility standards in the table would be required to incorporate conditions of design modifications to reduce the potential increase in the noise environment. The City shall also regulate construction to allow for efficient construction activities while also protecting noise sensitive land uses. New residential projects must provide for an interior noise level of 45 dB CNEL; thus the City shall review all residential and other noise-sensitive land uses within the 60 dB  $L_{dn}$  contours of Highways 29 and 12 to ensure that adequate noise attenuation has been incorporated into the design of the project. Alternatives to the use of sound walls are encouraged.

In addition to the Noise Element guidelines, the Napa County Airport Land Use Commission's *Airport Land Use Compatibility Plan* (Napa County, 1991) applies to the noise generated by activity at Napa County Airport. The *Airport Land Use Compatibility Plan* requires that the airport/land use noise compatibility analysis consider the future CNEL contours of each airport. These contours are calculated based on aircraft activity forecasts which are set forth in adopted airport master plans or which are considered by the Commission to be plausible. The Plan states that the maximum CNEL considered "normally acceptable" for most residential uses in the vicinity of airports covered by the Plan is 55 dBA. The Plan states that this standard is appropriate for areas with low ambient noise levels. In areas with higher ambient noise levels, the maximum CNEL considered "normally acceptable" for residential uses shall be 60 dBA. Factors which determine whether to apply the higher standard include the presence of major highways, large concentrations of residences or large-scale commercial and industrial uses.

## **2. Impacts and Mitigation Measures**

a. Criteria of Significance. A significant noise impact would be identified if a proposed use would be exposed to noise levels exceeding the City's noise and land use compatibility guidelines.

Project-generated noise would result in a significant impact on an existing land use (i.e., existing residences in the area) under the following conditions:

- Average noise levels ( $L_{dn}$ ) increase by 5 dBA or more but remain below the normally acceptable level (60  $L_{dn}$  for residences).
- Average noise levels ( $L_{dn}$ ) increase by more than 3 dBA and existing noise levels increase from below the acceptability level to above the normally acceptable level (60  $L_{dn}$  for residences).
- Average noise levels ( $L_{dn}$ ) increase by more than 3 dBA where existing levels are already above the normally acceptable level (i.e., 60  $L_{dn}$  for residences).

- Average noise levels ( $L_{dn}$ ) increase by more than 2 dBA in residential areas where the  $L_{dn}$  currently exceeds 70 dB.

These significance criteria recognize: (a) the threshold levels of acceptability established by the local government; (b) that once the threshold level has been exceeded, any noticeable change above that level results in a significant degradation of the noise environment; and (c) that a clearly noticeable change in the noise environment (a 5 dBA increase), even though the acceptability threshold has not been reached, is considered a substantial increase and would result in a significant impact under CEQA.

Short-term impacts resulting during the construction phase are considered significant under the following conditions: construction equipment average noise levels exceed 60 dBA during the daytime or 55 dBA during the nighttime outside of residences and also exceed existing ambient noise levels. These noise limits are chosen to minimize the potential for speech interference during the daytime and sleep disturbance at night.

b. Less-Than-Significant Impacts.

***Impact NOI-A: Aircraft noise exposure on the site is less than an  $L_{dn}$  of 55 dB. These noise levels would be compatible with residential activity. (LTS)***

The existing and projected  $L_{dn}$  due to aircraft overflight is and would be expected to remain below an  $L_{dn}$  of 55 dB. Maximum instantaneous noise levels, however, often reach 75 dBA on the eastern portion of the site during the daytime. The Napa County Noise Element recommends that maximum instantaneous noise levels indoors during the daytime not exceed 60 dB. Although there is no similar City requirement, it is noted this level would be achieved in a typical building with the windows open. Therefore, housing anywhere as proposed on the site would be compatible with the aircraft noise.

Condition of Approval NOI-A: None required. (LTS)

***Impact NOI-B: Traffic generated by the project would add to the noise generated by State Route 29/12. The additional traffic would result in an insignificant increase in the noise levels along SR 29/12 and other roads serving the site with the exception of Stanly Lane (see Impact NOI-4). (LTS)***

Calculations were made to determine the change in noise level along the streets serving the site as a result of project-generated traffic and also as a result of cumulative conditions plus project-generated traffic in the year 2010. These calculations show that, for the worst case condition in the year 2010 of cumulative-



plus-project traffic, noise levels along the highway/streets serving the site (State Route 29/12, State Route 12/21, State Route 121, Old Sonoma Road, and Cuttings Wharf Road) would increase by less than 2 decibels at all locations and in all cases would increase by an immeasurable amount due to project-generated traffic alone. A 2-decibel increase in the average traffic noise level is not generally detectable, especially when it takes place over a ten- to 15-year period.

Condition of Approval NOI-B: None required. (LTS)

c. Significant Impacts. The following section describes the potential impacts associated with the project and presents mitigation measures necessary to minimize impacts to less than significant.

**Impact NOI-1: Portions of the site proposed for employee housing and Neighborhood 1 would be exposed to noise levels that would be considered conditionally acceptable. The remainder of the site would be considered completely compatible. Noise levels in the conditionally acceptable area would require mitigation. (S)**

The location of the 60  $L_{dn}$  noise exposure contour on the Stanly Ranch site is shown in Figure IV.L-1. Housing between the 60  $L_{dn}$  contour and State Route 29/12 would be considered conditionally acceptable with the onsite noise environment, and housing located outside the 60  $L_{dn}$  contour would be considered normally acceptable. The Illustrative Master Plan for the Stanly Ranch site (Figure III-4) shows that the employee housing would be the closest housing to State Route 29/12. The  $L_{dn}$  in this area is 63 dB. A portion of Neighborhood 1 would be exposed to an  $L_{dn}$  of about 60 to 61 dB. This noise exposure is such that acceptable interior noise levels can be met with standard residential-grade windows as long as the buildings are mechanically ventilated to allow the windows to remain closed at the resident's option. Noise levels outdoors in the employee housing area and the closest portion of Neighborhood 1 to SR 29/12 would exceed an  $L_{dn}$  of 60 dB. Because State Route 29/12 is elevated in this area, it would not be possible to provide for outdoor noise reduction below 60 dB in these areas. If the homes were located between SR 29/12 and the backyards, some shielding would be provided, reducing the outdoor noise levels close to an  $L_{dn}$  of 60 dB. The Noise Element recommends that outdoor uses be discouraged where the  $L_{dn}$  exceeds 65 dB. Since noise levels at all locations on the site would be below an  $L_{dn}$  of 65 dB, there would be no conflict with current City policy. The *Draft General Plan* appears to place somewhat more emphasis on meeting an outdoor standard of 60 dB for residential areas. The Draft Noise Element text states that for residential areas in the City, the upper limit of "normally acceptable" on-site exterior noise should be 60 dB. Nonetheless, the noise and land use compatibility table in the Noise Element indicates that residential land uses are conditionally acceptable with an  $L_{dn}$  of up to 70 dB.

Mitigation Measure NOI-1a: Homes within Neighborhood 1 shall be sited to include useable yard space on the south side of buildings to shield this space from highway noise. Alternatively, the feasibility of using fencing to shield outdoor areas shall be evaluated based on topography. Noise levels in the outdoor use areas associated with the employee housing shall be mitigated by orienting the homes such that the buildings themselves shield the outdoor use area. If the employee housing area, as shown in Figure III-13, is rotated so that the parking lot is parallel to SR 29/12 and the patios face the parking lot, noise levels in most of the yards would be reduced to 60 dB or less. In some of the yards, noise levels may exceed 60 dB and be as high as 63 dB, but these noise levels would be consistent with the intent of the both the current and Draft Noise Elements of the City's *General Plan*.

Mitigation Measure NOI-1b: Homes within the 60-63 dB  $L_{dn}$  contour shall be required to provide mechanical ventilation to assure that interior noise standards are met. (LTS)

**Impact NOI-2: Noise generated by agricultural operations would occasionally generate significant noise levels in the new residential area. (S)**

Agricultural operations in adjacent vineyards, and particularly the operation of wind machines, would generate noise levels that could be annoying to new residents. Studies of wind machines at similar vineyards indicate that noise levels at 400 feet from wind machines reach 74 dBA. Inside of a typical house with the windows closed, these noise levels would reach about 44 dBA in rooms with windows facing the wind machine, louder than would be acceptable for nighttime noise exposure. Since wind machines are typically used during late night/early mornings, there is a possibility for sleep disturbance for units within 1,300 feet of a wind machine. Studies for residential areas adjacent to other vineyards have indicated that the wind machines are used between 10 and 30 nights a year. Noise impacts would be expected to be highest for those homes closest to the agricultural operation. Shielding provided by these homes would reduce noise levels for subsequent rows of homes. In terms of the City's noise and land use compatibility guidelines (assuming that the wind machines are used 4 hours a night for 30 nights out of the year), the annual average exterior  $L_{dn}$  at the distance of 400 feet would be 55 dB, which would be compatible. However, there is a potential for sleep interference for homes within 1,300 feet on those nights when the wind machines are used.

The Napa City Zoning Code Section 17.60.09.02 states, "Sound/noise-reducing design and construction techniques shall be required (e.g., window/door orientation, use of double pane windows, etc.), to reduce noise levels to occupants from adjoining farm operations to acceptable levels as defined in the Noise Element of the General Plans) prior to building permit."

**Mitigation Measure NOI-2:** Bedroom windows in homes within 1,300 feet of a wind machine shall have an STC (Sound Transmission Class) rating approximately 10 decibels higher than standard windows (i.e., an STC rating of 40). Installation of such windows would provide for acceptable noise levels indoors with the windows closed, even during wind machine use not in excess of sleep disturbance levels. (LTS)

**Impact NOI-3:** During construction, noise levels would be temporarily elevated on the property surrounding the site. There are scattered farm houses in this area that would experience these increased noise levels. Generally, construction would take place far from these areas and, while noticeable, would not be significant. For short periods of time when construction is taking place within several hundred feet of these homes and near occupied new homes on the project site, noise levels may be significant. (S)

Construction activity, including grading, infrastructure, and home building, would result in increased noise levels in the area. However, there are only a few scattered farm houses in the area. Residents of these homes would be affected by construction noise. However, the vast majority of construction on the site would take place far from these homes. At 400 feet from the site, maximum instantaneous noise levels would be expected to be below 60 dBA and average noise levels would be expected to be about 55 dBA. This level would be about the same as the existing noise level in the area and would not be significant. Therefore, there would only be short periods of time when construction would be taking place within 400 feet of these homes and where noise levels would begin to exceed the background noise level. At the worst, this noise increase would be expected to be annoying for a short period of time.

**Mitigation Measure NOI-3:** The following combination of measures shall be required for project construction:

- Construction activities shall be limited pursuant to Napa Municipal Code (NMC) 8.08.025 to 7 AM to 7 PM, Monday through Friday and 8 AM to 4 PM on weekends or legal holidays, unless a permit is first secured from the City Manager (or his/her designee) for additional hours. The ordinance further states that there will be: no start up of machines nor equipment prior to 8 AM, Monday through Friday; no delivery of materials nor equipment prior to 7:30 AM nor past 5 PM Monday through Friday; no cleaning of machines nor equipment past 6 PM, Monday through Friday; no servicing of equipment past 6:45 PM Monday through Friday.



- All internal combustion engines for construction equipment used on the site shall have state-of-the-art muffler systems required by current law and be properly maintained.
- Unnecessary idling of internal combustion engines shall be strictly prohibited. Grading and construction equipment shall be shut down when not in use.
- All stationary noise-generating construction equipment, such as air compressors and portable power generators, shall be located as far as practical from existing residences and businesses and provided with acoustical shielding if necessary.
- Residential neighbors adjacent to the project shall be notified of the construction schedule in writing.
- A noise disturbance coordinator, responsible for responding to complaints about construction noise, shall be designated by the project contractor. The telephone number for the disturbance coordinator shall be posted at the construction site and shall also be included in the notice sent to neighbors regarding the construction schedule. (LTS)

**Impact NOI-4: Project-generated traffic on Stanly Lane would significantly increase noise levels for the one existing residence adjacent to Stanly Lane near the bend in Stanly Lane. (S)**

After Stanly Lane is relocated and the project is completed, the roadway would be more than 100 feet from an existing ranch home located at the bend in Stanly Lane. Based on the noise measurement survey, the existing  $L_{dn}$  at this location is about 50 dBA. The increase in traffic along Stanly lane would increase noise levels in this location by more than 5 dBA, exceeding the first significance criterion although  $L_{dn}$  noise levels would remain in the “normally acceptable” range.

**Mitigation Measure NOI-4:** During the final design phase of the road and Bay Trail, the applicant shall incorporate five-foot high solid fencing or berming to help shield yards, patios or other primary outdoor use areas associated with the existing home. (LTS)



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## M. AIR QUALITY

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1. <b>Setting</b>
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a.    Air Pollution Climatology. The project site is located near the southern end of Napa Valley. The prevailing wind direction is southerly, reflecting thermal up-valley winds in the summer and channeled southerly winds ahead of approaching storms in the winter. Light or calm winds are relatively frequent and are a typical feature of sheltered inland valleys.

The marine influence on the Napa Valley's climate is most pronounced in spring and summer, when daily sea breezes temper daytime temperatures and sometimes bring nighttime stratus clouds to the area. Summer maximum temperatures average in the mid-80's with minimum temperatures in the 50's. Winter maximum temperatures are in the 50's with minimums in the 30's. Sunshine is plentiful in all seasons, and precipitation averages near 24 inches per year.

Napa County is part of the northern portion of the Bay Area Air Basin. The air pollution potential of the Napa Valley has been termed "high" due to the high frequency of light winds and surrounding mountains that restrict movement of pollutants. This designation refers only to ventilation characteristics of the area and not to actual pollutant levels, which are low due to the lack of upwind sources and relatively low level of development in the local air basin.

b.    Air Quality Standards. Both the U.S. Environmental Protection Agency and the California Air Resources Board have established ambient air quality standards for common pollutants. These ambient air quality standards specify levels of contaminants which represent safe levels that avoid specific adverse health effects associated with each pollutant. The ambient air quality standards cover what are called "criteria" pollutants because the health and other effects of each pollutant are described in criteria documents. Table IV.M-1 identifies the major criteria pollutants, characteristics, health effects and typical sources.

The Federal and California state ambient air quality standards are summarized in Table IV.M-2. The federal and state ambient standards were developed independently with differing purposes and methods, although both processes



**Table IV.M-1  
MAJOR CRITERIA POLLUTANTS**

Pollutant	Characteristics	Health Effects	Sources
Ozone	A highly reactive photochemical pollutant created by the action of sunshine on ozone precursors (primarily reactive hydrocarbons and oxides of nitrogen). Often called photochemical smog.	<ul style="list-style-type: none"> <li>• Eye Irritation</li> <li>• Respiratory function impairment</li> </ul>	The major sources of ozone precursors are combustion sources such as factories and automobiles, and evaporation of solvents and fuels
Carbon Monoxide	Carbon monoxide is an odorless, colorless gas that is highly toxic. It is formed by the incomplete combustion of fuels.	<ul style="list-style-type: none"> <li>• Impairment of oxygen transport in the bloodstream</li> <li>• Aggravation of cardiovascular disease</li> <li>• Fatigue, headache, confusion, dizziness</li> <li>• Can be fatal in the case of very high concentrations</li> </ul>	Automobile exhaust; combustion of fuels; combustion of wood in woodstoves and fireplaces
Nitrogen Dioxide	Reddish-brown gas that discolors the air, formed during combustion.	<ul style="list-style-type: none"> <li>• Increased risk of acute and chronic respiratory disease</li> </ul>	Automobile and diesel truck exhaust; industrial processes; fossil-fueled power plants
Sulfur Dioxide	Sulfur dioxide is a colorless gas with a pungent, irritating odor.	<ul style="list-style-type: none"> <li>• Aggravation of chronic obstruction lung disease</li> <li>• Increased risk of acute and chronic respiratory disease</li> </ul>	Diesel vehicle exhaust; oil-powered power plants; industrial processes
Particulate Matter (PM)	Solid and liquid particles of dust, soot, aerosols and other matter which are small enough to remain suspended in the air for a long period of time.	<ul style="list-style-type: none"> <li>• Aggravation of chronic disease and heart/lung disease symptoms</li> </ul>	Combustion; automobiles; field burning; factories and unpaved roads. Also a result of photochemical processes.

**Table IV.M-2**  
**FEDERAL AND STATE AMBIENT AIR QUALITY STANDARDS**

Pollutant	Averaging Time	Federal Primary Standard	State Standard
Ozone	1-Hour	0.12 PPM	0.09 PPM
	8-Hour	0.08 PPM	--
Carbon Monoxide	8-Hour	9.0 PPM	9.0 PPM
	1-Hour	35.0 PPM	20.0 PPM
Nitrogen Dioxide	Annual	0.05 PPM	--
	1-Hour	--	0.25 PPM
Sulfur Dioxide	Annual	0.03 PPM	--
	24-Hour	0.14 PPM	0.05 PPM
	1-Hour	--	0.5 PPM
PM <sub>10</sub>	Annual	50 µg/m <sup>3</sup>	30 µg/m <sup>3</sup>
	24-Hour	150 µg/m <sup>3</sup>	50 µg/m <sup>3</sup>
PM <sub>2.5</sub>	Annual	15 µg/m <sup>3</sup>	--
	24-Hour	65 µg/m <sup>3</sup>	--
Lead	30-Day Avg.	--	1.5 µg/m <sup>3</sup>
	Month Avg.	1.5 µg/m <sup>3</sup>	--

PPM = Parts per Million

µg/m<sup>3</sup> = Micrograms per Cubic Meter

attempted to avoid health-related effects. As a result, the federal and state standards differ in some cases. In general, the California state standards are more stringent. This is particularly true for ozone and PM<sub>10</sub>.

The U.S. Environmental Protection Agency has recently announced new national air quality standards for ground-level ozone and for fine Particulate Matter. The existing 1-hour ozone standard of 0.12 parts per million (PPM) will be phased out and replaced by an 8-hour standard of 0.08 PPM. New national standards for fine Particulate Matter (diameter 2.5 microns or less) have also been established for 24-hour and annual averaging periods.

c. Current Air Quality. The Bay Area Air Quality Management District (BAAQMD) operates a network of air monitoring sites within the Bay Area, including one in Napa. Table IV.M-3 shows a summary of air quality data for this monitoring site for the period 1993-1996. Data are shown for ozone, carbon monoxide, PM<sub>10</sub> and nitrogen dioxide. The number of days exceeding each standard are shown for each year. The state and federal ambient air quality standards are generally met with the exception of those for ozone and PM<sub>10</sub>.

**Table IV.M-3**  
**SUMMARY OF AIR QUALITY DATA FOR NAPA, 1994-1996<sup>a,b</sup>**

Pollutant	Standard	Days Exceeding Standard in:		
		1994	1995	1996
Ozone	Federal 1-Hour	0	1	0
Ozone	State 1-Hour	0	4	0
Carbon Monoxide	State/Federal 8-Hour	0	0	0
Nitrogen Dioxide	State 1-Hour	0	0	0
PM <sub>10</sub>	Federal 24-Hour	0	0	0
PM <sub>10</sub>	State 24-Hour	2	1	1

<sup>a</sup> California Air Resources Board, 1994-1995, California Air Quality Data Summary, Vols. XXVI-XXVII.

<sup>b</sup> Bay Area Air Quality Management District, Air Currents, April 1997.

d. Attainment Status and Regional Air Quality Plans. The federal Clean Air Act and the California Clean Air Act of 1988 require that the State Air Resources Board, based on air quality monitoring data, designate portions of California where the federal or state ambient air quality standards are not met as "nonattainment areas". Because of the differences between the national and state standards, the designation of nonattainment areas is different under the federal and state legislation.

(1) Federal Air Quality Program. The Bay Area is currently a nonattainment area only for ozone . In June 1998 the U.S. Environmental Protection Agency (E.P.A.) reclassified the Bay Area from "maintenance area" to nonattainment for ozone based on recent violations of the federal standards at several locations in the air basin. This reversed the air basin's reclassification to "maintenance area" for ozone in 1995. Reclassification requires an update to the region's federal air quality plan.

The proposed revisions to the national ambient standards for ozone and Particulate Matter have no immediate effect on federal nonattainment planning. Existing ozone and Particulate Matter designations will remain in effect until U.S.E.P.A establishes new designations based on data from 1997, 1998 and 1999. No new controls will be required with respect to the new standards until after the year 2002.



(2) State Air Quality Program. Under the California Clean Air Act, Napa County is a nonattainment area for ozone and PM<sub>10</sub>. The County is either attainment or unclassified for other pollutants. The California Clean Air Act requires local air pollution control districts to prepare air quality attainment plans. These plans must provide for district-wide emission reductions of five percent per year averaged over consecutive three-year periods or if not, provide for adoption of "all feasible measures on an expeditious schedule". The Act also grants air districts explicit statutory authority to adopt indirect source regulations and transportation control measures, including measures to encourage the use of ridesharing, flexible work hours or other measures which reduce the number or length of vehicle trips.

The current area-wide plan required by the California Clean Air Act was adopted in December 1997. The Plan proposes the imposition of controls on stationary sources (factories, power plants, industrial sources, etc.) and Transportation Control Measures designed to reduce emissions from automobiles. Since the Plan does not provide for a 5 percent annual reduction in emissions, it proposes the adoption of "all feasible measures on an expeditious schedule".

e. City of Napa General Plan Policies. The adopted *City General Plan* (City of Napa, 1983) contains the following policies regarding air quality:

- Maintain good air quality by minimizing the sources of air pollutants in Napa. Regulate the type, location and amount of industrial development, mining and other point sources to minimize pollutant discharge in accordance with the Air Quality Management Plan.
- Reduce air pollutants generated by automobile traffic by concentrating higher density development, locating new residential development particularly near urban services and public transit, and improving traffic circulation. Provide land for convenience or neighborhood shopping centers throughout the City to avoid crosstown travel.
- Require development to provide or accommodate transit services (bus turnouts, bus loading facilities). Require high traffic generating employment centers to provide employee transit services.
- Require development to provide pedestrian and bicycle trails within projects to link with citywide trails.
- Implement traffic mitigation measures to improve traffic flow, consistent with the Circulation Element.
- Retain open space land, vegetation and waterways to enhance oxygen exchange and remove pollutants from the air.
- Recognize Napa's microclimates in adopting energy conservation measures, in planning public facilities, and in reviewing landscaping plans.

The *Draft Policy Document* (City of Napa, 1996) contains the following air quality policies within the Natural Resources Element:

- The City shall encourage the use of mass transit, bicycle facilities, and pedestrian walkways in order to decrease use of private vehicles and thereby reduce emissions from mobile sources.
- The City shall encourage land use patterns and management practices that conserve air and energy resources, such as mixed use development and provisions for local-serving commercial uses adjacent to neighborhoods.
- The City shall promote energy conservation/energy efficiency improvement programs, which reduce energy demand from power-generating facilities which contribute to background levels of regional air pollutants.
- The City shall, during discretionary review, require that development proposals comply with federal and state air quality standards, or make findings that a project has overriding benefits to the community that outweigh nonattainment of the standards.
- The City shall, during early consultation with project proponents, encourage project design that minimizes direct and indirect air emissions. Projects should consider the following air quality concerns:
  - a. Land use and design measures to encourage alternatives to the automobile and to conserve energy;
  - b. Land use and design measures to minimize exposure of sensitive receptors to odors, toxics, and criteria pollutants; and
  - c. Applicable Bay Area Air Quality Management District rules, regulations and permit requirements.
- The City shall continue and, where appropriate, expand the use of synchronized traffic signals on roadways susceptible to emissions improvement through approach control.

f. Sensitive Receptors. The BAAQMD defines sensitive receptors as facilities where sensitive receptor population groups (children, the elderly, the acutely ill and the chronically ill) are likely to be located. These land uses include residences, schools playgrounds, child care centers, retirement homes, convalescent homes, hospitals and medical clinics. There are no sensitive receptors near the project site.

## **2. Impacts and Mitigation Measures**

a. Criteria of Significance. The following defines significance related to air quality:

- A project contributing to carbon monoxide (CO) concentrations exceeding the State Ambient Air Quality Standard of 9 parts per million (ppm) averaged

over 8 hours or 20 ppm for 1 hour would be considered to have a significant impact.

- A project that generates criteria air pollutant emissions in excess of the BAAQMD annual or daily thresholds would be considered to have a significant air quality impact. The current thresholds are 15 tons/year or 80 pounds/day for Reactive Organics Gases (ROG), Nitrogen Oxides (NO<sub>x</sub>) or PM<sub>10</sub>.
- Any project with the potential to frequently expose members of the public to objectionable odors would be deemed to have a significant impact.
- Any project with the potential to expose sensitive receptors or the general public to substantial levels of toxic air contaminants would be deemed to have a significant impact.
- Any project that would result in population growth for the jurisdiction to exceed the values included in the current regional Clean Air Plan.

b. Impacts Found to be Less Than Significant. The current regional air plan ('97 Clean Air Plan ) contains analysis and forecasts of emissions that are based on projections of population and employment. The current CAP utilized ABAG's *Projections '96* in the forecast of future air quality trends. ABAG projections are based on the General Plans for cities and counties within the Bay Area.

The Chapter IV subsection entitled "Population, Employment, and Housing" concludes that "the project would not result in substantial, unanticipated population or housing growth or cumulatively exceed any local or regional population projections. The project would therefore have no impact related to inconsistencies with the regional air quality plan.

Traffic generated by the project would contribute to local carbon monoxide concentrations. On the local scale, the pollutant of greatest interest is carbon monoxide. Concentrations of this pollutant are related to the levels of traffic and congestion along streets and at intersections.

The CALINE-4 computer simulation model was applied to two intersections near the project site. These intersections were selected on the basis of PM peak hour Level of Service. Both would operate at Level of Service D or worse for one or more of the traffic scenarios. The CALINE-4 program and the assumptions made in its use are described in Appendix I.

The results of the CALINE-4 modeling for the two selected intersections are shown in Table IV.M-4. Concentrations are shown for three scenarios:



**Table IV.M-4  
 WORST CASE CARBON MONOXIDE CONCENTRATIONS  
 NEAR SELECTED INTERSECTIONS, IN PPM**

Intersection	Existing (1998)		Existing + Project (1998)		Cumulative + Project (2010)	
	1-Hour	8-Hour	1-Hour	8-Hour	1-Hour	8-Hour
SR 29/SR 121	11.0	7.6	11.4	7.9	6.1	4.1
SR 29/ SR 221	11.0	7.6	11.2	7.7	5.9	4.0
Most Stringent Standard	20.0	9.0	20.0	9.0	20.0	9.0

- Existing traffic (year 1998);
- Existing traffic plus proposed project (year 1998);
- Cumulative traffic plus proposed project (year 2010).

The concentrations in Table IV.M-4 are to be compared to the state and federal ambient 1-hour air quality standards of 20 PPM and 35 PPM. Predicted 8-hour concentrations in Table IV.M-4 are to be compared to the state and federal 8-hour standards of 9 PPM.

Existing concentrations meet all ambient air quality standards. The addition of project traffic would increase concentrations by as much as 0.4 PPM for the 1-hour averaging time and 0.3 PPM for the 8-hour averaging time, but concentrations would remain well below the applicable standards.

Concentrations in 2010, assuming project and cumulative traffic increases, would be lower than year 1997 concentrations despite increased traffic, due to anticipated reductions in emission rates for vehicles resulting from state-mandated emission control programs for automobiles. Concentrations would remain well below the applicable standards. The impact of the project on local carbon monoxide concentrations is considered to be less-than-significant.

**Impact AIR-1: Construction activities such as excavation and grading operations, construction vehicle traffic and wind blowing over exposed earth would generate exhaust emissions and fugitive particulate matter emissions that would affect local air quality. (S)**

Construction activities are a source of organic gas emissions. Solvents in adhesives, non-waterbase paints, thinners, some insulating materials and caulking materials would evaporate into the atmosphere and would participate in the photochemical

reaction that creates urban ozone. Asphalt used in paving is also a source of organic gases for a short time after its application.

Construction dust could affect local air quality at various times during construction of the project. The dry, windy climate of the area during the summer months creates a high potential for dust generation when and if underlying soils are exposed to the atmosphere.

The effects of construction activities would be increased dustfall and locally elevated levels of PM<sub>10</sub> downwind of construction activity. Construction dust has the potential for creating a nuisance at nearby properties or at previously-completed portions of the project.

Mitigation Measure AIR-1: The BAAQMD has prepared a list of feasible construction dust control measures that can reduce construction impacts to levels that are less than significant. The following construction practices shall be required during all phases of construction within the project site:

- Water all active construction areas at least twice daily.
- Water or cover stockpiles of debris, soil, sand or other materials that can be blown by the wind.
- Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard.
- Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas and staging areas at construction sites.
- Sweep daily (preferably with water sweepers) all paved access roads, parking areas and staging areas at construction sites.
- Sweep streets daily (preferably with water sweepers) if visible soil material is carried onto adjacent public streets.
- Hydroseed or apply non-toxic soil stabilizers to inactive construction areas.
- Enclose, cover, water twice daily or apply non-toxic soil binders to exposed stockpiles (dirt, sand, etc.).
- Limit traffic speeds on unpaved roads to 15 mph.
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways.
- Replant vegetation in disturbed areas as quickly as possible.

- Shut down grading and construction equipment when not in use.  
(LTS)

**Impact AIR-2: New traffic generated by the project and on-site vehicle use would increase regional emissions. (S)**

New emissions from the project would be direct and indirect. Direct emissions consist of emissions from on-site combustion for space- and water-heating, fireplace use, and other minor sources. Additional emissions would be created by maintenance equipment and vehicles. The overwhelming source of emissions would be indirect (i.e., related to auto and truck traffic generated by project land uses).

The URBEMIS-7G model (see Appendix I) was used to calculate emissions from all trips to or from the project. This analysis was based on weekend trip generation, which is somewhat higher than weekday trip generation.

Daily emissions associated with project vehicle use are shown in Table IV.M-5. Pollutants shown include reactive organic gases (ROG) and oxides of nitrogen (NO<sub>x</sub>)(two precursors of ozone) and PM<sub>10</sub> (particulate matter, 10 micron). Emissions associated with the project would exceed the BAAQMD thresholds of significance, so project impacts would be significant.

**Table IV.M-5  
REGIONAL VEHICULAR EMISSION  
INCREASE, IN POUNDS PER DAY**

	ROG	NO <sub>x</sub>	PM <sub>10</sub>
Project	172.8	270.5	87.1
BAAQMD Daily Thresholds of Significance	80.0	80.0	80.0

The *Draft SRSP* incorporates a Transportation Demand Management (TDM) Plan. Although developed to reduce traffic congestion, the TDM plan would also reduce project impacts on regional air quality. The TDM plan consists of eight programs. The effects of three of these programs have been reflected in the trip generation rates used to calculate the regional impact of the project (see Table IV.M-5) These programs were:

- Provision of on-site housing opportunities for the employees of Stanly Ranch;
- Provision of on-site convenience services; and
- Use of golf carts for travel within Stanly Ranch.

The other five elements of the TDM plan were not reflected in the trip generation analysis of the project. These are:

- Provision of an integrated bicycle system;
- Provision of a transportation center;



- Provision of resort shuttles to downtown Napa and other area attractions;
- Provision for connections with existing transit services; and
- Provision of ridesharing/transit information.

The effect of the above measures would be to reduce project trip generation by 1 to 2 percent beyond the reduction included in the calculation of project impacts. This would not be sufficient to reduce project impacts to a level that is less than significant. Project impacts shown in Table IV.M-5 would need to be reduced by about 70 percent to bring emissions to below the BAAQMD thresholds of significance.

The TDM Plan for the *Draft SRSP* is a comprehensive program of strategies to reduce vehicle use on and off the project site. It contains land use measures, transit/pedestrian/bicycle incentives and alternative transportation mode strategies (electric carts, shuttle service, etc.). Other transportation strategies such as parking controls or provision of park-and-ride lots are unlikely to be effective or workable at a development of this nature.

Mitigation Measure AIR-2: The applicant shall be required to implement the Stanly Ranch TDM Plan covering the above measures and any additional measures proposed by the applicant in April 1998. The project would contain some non-automotive emission sources. Although these sources represent only a small fraction of total project emissions, effective control measures to reduce emissions from these sources are available. The following shall be required:

- Use of low emission maintenance equipment and vehicles where feasible.
- Use of natural gas-fired fireplaces rather than wood-burning fireplaces.

Even with the implementation of all mitigation measures, project emissions would exceed the BAAQMD thresholds of significance. Project impacts on regional air quality are considered significant and unavoidable. (SU)



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## N. PUBLIC HEALTH AND SAFETY

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The purpose of this section is to assess the potential public health and safety effects resulting from site development. Hazardous materials<sup>1</sup> may be present at the site from current or historical land uses. Such materials could potentially affect the health of construction workers during site development activities, and future site users. In addition, the proposed project could result in increased hazardous materials use at the site.

### 1. Setting

A Phase I Preliminary Hazardous Materials Site Assessment was prepared for the site by Harding Lawson Associates (HLA) in 1990 (HLA, 1990). The Phase I assessment was updated by HLA in 1995 (HLA, 1995). These investigations included a site and off-site (within 1/4 mile) reconnaissance, historical aerial photograph review, interviews with persons knowledgeable about the site, a review of geologic, hydrogeologic, and topographic data, and a regulatory database search of reported chemical use, storage, disposal, and releases at or within two miles of the site.

The findings of these assessments, as they relate to the potential for hazardous materials to be present in the subsurface, are summarized below. The summary emphasizes the most recent 1995 Phase I update, which reflects up-to-date information, except where additional information regarding the possible presence of hazardous materials on-site was included in the 1990 Phase I assessment. Additional information obtained from interviews, aerial photographs, and additional site reconnaissance activities during the preparation of this EIR is also included below.

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<sup>1</sup> A hazardous material is defined as any material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment. Hazardous materials include, but are not limited to, hazardous substances, hazardous waste, radioactive materials, and any material which a handler or the administering agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or environment (California Health and Safety Code, Chapter 6.95, Section 25501).



a. Summary of Previous Environmental Investigations.

(1) Aerial Photographs and Site Reconnaissance. A review of aerial photographs indicates that the site was used for agricultural and ranching purposes since at least 1932 (HLA, 1995). Historical agricultural uses included cultivation of grapes, various fruits, potatoes, grains, and grazing crops. Other historical uses included a dairy and farm (HLA, 1995). A shed containing small quantities of herbicides and pesticides, a 550-gallon aboveground diesel storage tank, and a 1,000-gallon portable diesel tank were observed during a 1995 site reconnaissance.

Other hazardous materials use/storage at the site during the 1990 site visit (HLA, 1990) included eleven 55-gallon drums and one 30-gallon drum observed (one contained waste oil, seven contained diesel, and four were empty but stained with oily residue). The 1,000-gallon portable diesel tank, observed in 1995, was also observed during the 1990 site visit. Staining of soil in the vicinity of these storage containers was observed on the floor of the unpaved garage. Oily soil and dead grass were also observed outside the garage. In addition, piles of refuse, a partially demolished aboveground, wooden tank stand, and stained soil with a petroleum odor were observed south of the garage (HLA, 1990).

(2) Underground Storage Tanks. Two 10,000-gallon underground storage tanks (USTs), used for storing diesel and gasoline, were operated at the site from 1972 to 1989 (HLA, 1995). Evidence of subsurface contamination was observed during removal of the tanks in January 1989. Following tank removal, five soil samples were collected from within the tank excavation. The soil samples contained total petroleum hydrocarbons (TPH) as diesel ranging from 60 to 3,500 milligrams per kilogram (mg/kg). Soil samples collected near the former gasoline tanks contained benzene (0.001 mg/kg), toluene (0.006 mg/kg) and xylenes (0.003 mg/kg). TPH as gasoline were not reported (HLA, 1995).

The former UST locations were overexcavated beyond the depth and lateral extent of the visibly contaminated soil, to a total depth of 26 feet below ground surface (bgs). Following over excavation, one soil sample was collected from the depth of the excavation and analyzed for TPH. TPH were not reported above a laboratory reporting limit of 10 mg/kg, and the excavation was subsequently backfilled. Approximately 26 cubic yards of contaminated soil associated with the tank removal activities were removed and transported off-site for disposal in January 1990.

One soil boring was subsequently installed near the former tank locations in November 1989 to assess possible groundwater contamination associated with the petroleum release. Six soil samples were collected. The soil analyses did not reveal significant soil contamination (toluene was reported at 0.001 mg/kg at depths of 6 and 13 feet bgs). Groundwater was not encountered to a depth of 50 feet bgs in the

boring. The Napa County Department of Environmental Management (NCDEM) recommended no further action on the site and the San Francisco Regional Water Quality Control Board (RWQCB) approved site closure in 1990.

(3) Hazardous Materials in Structures. Asbestos-containing materials (ACM) and lead-based paint surveys have not been performed at the site. The structures on the site were constructed before 1956, prior to ACM and lead-based paint regulations, and have the potential to contain ACM and lead-based paint. A visual inspection of one vacant residence was conducted in 1990 to evaluate whether ACM were present in the structure; no samples were collected as part of the inspection. Potential ACM-containing building material, such as linoleum floor tiles, roofing material, and plaster board were observed (HLA, 1990). Structures on the site may also contain materials with small amounts of hazardous materials, such as fluorescent light fixtures and light ballasts containing small quantities of polychlorinated biphenyls (PCBs) and mercury.

b. Electrical Overhead Transmission Lines and Electromagnetic Fields. One Pacific Gas & Electric Company (PG&E) electrical overhead transmission line, the Vaca-Dixon Lakeville 230 kilovolt (kV) line, traverses the project site. The transmission line runs east to west across the northern "panhandle" portion of the project, approximately 500 feet south of the location of the proposed winery (Whitcomb, 1997). Transmission, distribution, and utilization of electricity generates electromagnetic fields (EMF).

There is public concern that EMF generated by transmission lines may have carcinogenic and other adverse human health impacts. Several epidemiological studies have been published over the past fifteen years that have examined possible associations between EMF exposure and various health effects, including cancer, in both occupational and community settings (NIOSH, 1996). A recent study conducted by the National Cancer Institute found little evidence to conclude that children living in homes characterized by high measured time-weighted average magnetic-field levels or by the highest wire-code category have an increased risk of developing acute lymphoblastic leukemia (Linnet et al., 1997). Currently, no health-based standards for EMF exposure exist because no adverse health effects of EMF have been conclusively demonstrated.

c. Regulatory Framework.

(1) Hazardous Materials Management. The use, storage, and disposal of hazardous materials, including management of contaminated soils and groundwater, are regulated by numerous local, state, and federal laws and regulations. The United States Environmental Protection Agency (U.S. EPA) is the federal administering agency for hazardous materials and waste regulations. State agencies include the

California EPA (Cal/EPA), California Department of Toxic Substances Control (DTSC), the San Francisco Bay Regional Water Quality Control Board (RWQCB), the California Air Resources Board (CARB), and the Bay Area Air Quality Management District (BAAQMD). Local regulatory agencies include the Napa County Department of Environmental Management (NCDEM), the Napa County Agricultural Commissioner's Office (NCACO), and the City of Napa Fire Department (NFD). A description of agency jurisdiction and involvement in management of hazardous materials is provided below.

(a) *U.S. Environmental Protection Agency.* The U.S. EPA is the federal agency responsible for enforcement and implementation of federal laws and regulations pertaining to hazardous materials. The legislation includes the Resource Conservation and Recovery Act of 1986 (RCRA), the Superfund Amendments and Reauthorization Acts of 1986 (SARA), and the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA). The federal regulations are primarily codified in Title 40 of the Code of Federal Regulations (40 CFR). The U.S. EPA provides oversight and supervision for site investigations and remediation projects, and has developed land disposal restrictions and treatment standards for the disposal of certain hazardous wastes.

(b) *Department of Toxic Substances Control.* The California Department of Toxic Substances Control works in conjunction with the U.S. EPA to enforce and implement specific laws and regulations pertaining to hazardous wastes. The California legislation for which DTSC has primary enforcement authority includes the Hazardous Waste Control Act and the Hazardous Substance Account Act. Most state hazardous waste regulations are contained in Title 22 of the California Code of Regulations (CCR). The California Department of Toxic Substances Control generally acts as the lead agency for soil and groundwater cleanup projects, and provides cleanup and action levels for subsurface contamination that are equal to, or more restrictive than, federal levels.

(c) *San Francisco Bay Regional Water Quality Control Board.* The City of Napa is located within the jurisdiction of the San Francisco Bay RWQCB. The RWQCB is authorized by the California Porter-Cologne Water Quality Act of 1969 to implement water quality protection laws. The RWQCB provides oversight for sites where the quality of groundwater or surface waters are threatened, and has the authority to require investigations and remedial actions.

(d) *Napa County Hazardous Materials Management.* The primary agencies responsible for local enforcement of state and federal laws include the Napa County Department of Environmental Management (NCDEM), and the Napa County Agricultural Commissioner Office (NCACO). No additional hazardous materials ordinances are implemented by the City or County. The NCDEM coordinates with



NCACO to administer programs for hazardous waste generators, and hazardous materials storage (including aboveground and underground storage of hazardous materials and acutely hazardous materials). The NCACO issues pesticide use permits, and collects information on agricultural (e.g., farmland) sites identified by NCDDEM as handling hazardous materials. The City of Napa Fire Department conducts regular inspections of all occupancies, including those storing hazardous materials.

(2) Worker Health and Safety. Worker health and safety is regulated at the federal level by the Federal Department of Industrial Relations. Under this jurisdiction, workers at hazardous waste sites must receive specialized training and medical supervision according to the Hazardous Waste Operations and Emergency Response (HAZWOPER) regulations (29 CFR Part 1210.120). Additional regulations have been developed for construction workers potentially exposed to lead (29 CFR Part 1926.62) and asbestos (29 CFR Part 1926.1101). The U.S. EPA administers federal regulations for the protection of agricultural workers involved in pesticide use (40 CFR).

Worker health and safety in California is regulated by the California Department of Industrial Relations, Division of Occupational Safety and Health (Cal/OSHA). California standards for workers dealing with hazardous materials are contained in Title 8, CCR, and include practices for all industries (General Industry Safety Orders), and specific practices for construction, and hazardous waste operations and emergency response. Cal/OSHA conducts on-site evaluations and issues notices of violation to enforce necessary improvements to health and safety practices. State regulations pertaining to agricultural workers potentially exposed to pesticides (Title 3, CCR) are administered by the California Department of Pesticide Regulations (Cal/DPR), and generally enforced by NCACO.

(3) Relevant Local Policies.

(a) *City of Napa General Plan.* The 1986 adopted City of Napa *General Plan* does not contain specific goals, objectives, or policies regarding public health and safety and hazardous materials. However, the *Draft Policy Document* for the City of Napa General Plan, *Envision Napa 2020*, contains measures to reduce potential impacts from hazardous materials (City of Napa, 1996). The following goals and policies are applicable to the proposed project.

Goal HS-7: To reduce the risks to health and safety from hazardous wastes.

Policy HS-7.1: The City shall re-evaluate, modify if necessary, and implement changes to the short-term goals of the Household Hazardous Wastes Element.

Policy HS-7.2: The City shall support the County's proposed Integrated Waste Management Plan.

Policy HS-7.3: The City shall support the County's role as the Certified Unified Program Agency for all County jurisdictions.

The proposed project is generally consistent with these goals and policies.

The 1996 update to the 1992 City of Napa *Draft General Plan* also contains policies regarding EMF exposure (City of Napa, 1992). The Plan states that "construction of new structures designed for human occupancy and development of outdoor facilities used on a regular basis by people should be discouraged in areas where expected EMF exposures exceed the County's adopted EMF standards." The County (NCDEM) has not adopted any EMF standards to date (Fergus, 1997).

## **2. Impacts And Mitigation Measures**

a. Criteria of Significance. An impact to public health and safety from the proposed project would be considered significant if it creates a potential public hazard or involves the use, production or disposal of materials that could pose a hazard to human, animal, or plant populations.

**Impact PHS-1: Asbestos-containing materials (ACM) and lead-based paint, if present in existing farm structures, could cause adverse health impacts to workers during demolition activities. (S)**

Many of the current structures on the site were built before 1956, and may have been painted with lead-based paint, and/or may have incorporated asbestos-containing materials. During demolition, asbestos fibers and/or lead-based paint dust could be released, creating a health hazard for construction workers. Asbestos is a known occupational carcinogen. Exposure to asbestos through inhalation or ingestion of asbestos fibers can cause asbestosis and lung cancer. Federal, state, and local BAAQMD requirements regulate the removal of asbestos or suspect asbestos-containing material, including the demolition of structures where asbestos is present; appropriate containment, worker training, and disposal are required (29 CFR Part 1926.1101; 40 CFR Part 61 and 152; Title 8, CCR, Section 1529; BAAQMD Regulation 11, Rule 2).

Lead can cause adverse health effects including high blood pressure, digestive problems, nerve disorders, memory and concentration problems, and other effects (U.S. EPA, 1995); lead is also a suspected carcinogen and known teratogen. There are specific federal and state requirements pertaining to the demolition of structures where lead or materials containing lead are present (29 CFR Part 1926.62; Title 8,

CCR, Section 1532.1). All peeling and bubbling paint must be removed by trained workers prior to demolition.

Mitigation Measure PHS-1: Prior to demolition activities, an asbestos survey and a lead-based paint survey or screening of all on-site structures proposed for demolition shall be completed to determine if these materials are present, which may require abatement or which would potentially pose a health risk to construction workers during site demolition activities. The asbestos survey shall be completed in accordance with BAAQMD regulations,<sup>2</sup> and shall include the collection and analysis of suspect ACM. If ACM were found to be present, specifications shall be prepared for safe removal and disposal (abatement) of ACM by trained workers, in accordance with applicable federal, state, and local BAAQMD requirements. The lead-based paint survey or screening shall be completed by a qualified environmental professional (e.g., industrial hygienist). If lead-based paint were found to be present, demolition shall be conducted in compliance with the California Construction Lead Standard (Title 8, CCR, Section 1532.1) by trained workers. (LTS)

**Impact PHS-2: Hazardous materials may currently be stored in existing farm structures, and could potentially cause health effects in workers during demolition activities. (S)**

The garage and storage shed currently store small quantities of hazardous materials, and may also contain hazardous waste since waste oil was historically observed on-site. Some of the on-site structures contain fluorescent light fixtures, which may contain polychlorinated biphenyls (PCBs) and mercury. PCBs are recognized by the State of California to cause cancer and reproductive harm under Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986). Light ballasts manufactured after January 1978 do not contain PCBs (DTSC, 1994). Elemental mercury is an acute and chronic toxin found to cause coughing, chest pains, nausea and vomiting, neurological and liver damage, and central nervous system depression (Levy, 1988).

Mitigation Measure PHS-2: An inventory of the interior areas of all on-site structures shall be completed prior to their demolition. If hazardous materials are identified as being stored in these areas at that time, those materials shall be transported to and disposed of/recycled at an appropriate off-site facility in accordance with applicable regulations. All PCB-containing materials (e.g.,

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<sup>2</sup> The survey shall be performed by a person who is certified by the Division of Occupational Safety and Health pursuant to regulations required by subdivision (b) of Section 9021.5 of the Labor Code, and who has taken and passed an EPA-approved Building Inspector course and who conforms to the procedures outlined in this course (BAAQMD, Regulation 11, Rule 2, 303.8).



fluorescent light ballasts) shall be manifested and disposed of by a licensed hazardous waste contractor in accordance with federal and state regulations (40 CFR Part 761; Title 22, CCR, Section 66262; DTSC, 1994). Up to 25 mercury-containing fluorescent light tubes may be disposed of as non-hazardous waste, provided that the waste is not federally regulated and the tubes are disposed of at one time in a day (DTSC, 1994). If more than 25 mercury-containing tubes are disposed at one time in a day, the tubes shall be managed and disposed of as a hazardous waste or recycled (Title 22, CCR, Section 66262). An environmental professional shall be present to monitor demolition activities during removal of the floor/foundations to determine if hazardous materials releases, related to historic operations at the site, have affected soils beneath the floors/foundations. If contaminated soil were encountered or suspected (e.g., soil discoloration or odor), a soil sampling plan shall be prepared and implemented prior to disturbance of soils. If sampling is required, the soil samples shall be collected by a qualified environmental professional, and the analytical results evaluated for determination of soil management options and an appropriate health and safety plan for construction workers developed. Regulatory agency notification, if applicable, shall be completed. (LTS)

**Impact PHS-3: Construction workers and the public may potentially be exposed to pesticides, herbicides, and other hazardous materials during construction activities. (S)**

Areas of the site proposed for development historically were used for agricultural purposes. Prior to the development of more rigorous pesticide regulations in the 1970s, DDT, chlordane, and sodium arsenite may have been used on the site (Dannenberg, 1997). Beginning in 1990, the State of California Department of Pesticide Regulation (Cal/DPR) required growers to report their monthly use of pesticides. A review of Pesticide Use Reports collected from three different operators/growers in the region indicates that primarily Roundup, Rubigan, Sulfur Dust, Spreader Binder RNA, Simazine, and Red Top pesticides were applied by ground method to the site. Areas ranging from 26 to 108 acres were treated monthly, with the greatest extent of application during the months of April through July (CDFA, 1990-1997).

The California Department of Food and Agriculture (CDFA) conducted a study in 1985 to determine agricultural sources of DDT residues (DDTr) in soils across 32 counties in the state (CDFA, 1985). Two sites in Napa County, which included the Carneros region, were selected for soils testing based on historical DDTr use. CDFA identified detectable levels of DDT in all soil samples, ranging in concentration from 0.026 mg/kg to 1.607 mg/kg DDT. The report concluded that contamination of

agricultural soils in California by DDT is statewide, and that DDT residues may survive in soil for 12 to 15 years, or longer.

It is unknown whether hazardous materials use (including pesticides, herbicides and fungicides) associated with historical agricultural land uses have affected soil and groundwater at the site. Construction workers could be exposed to hazardous materials, if present in soil or groundwater, during earthwork activities including grading operations, utilities placement, and foundation installation.

Mitigation Measure PHS-3: To assess whether past land uses have resulted in pesticides and/or herbicides and other hazardous materials being present in shallow soils, soil samples shall be collected from areas of the project proposed for development. A soil sampling plan shall be developed by a licensed professional, in accordance with U.S. EPA SW-846 methodology (U.S. EPA, 1986), prior to initiation of grading on the site. A random sampling plan shall be developed for the entire region proposed for residential and commercial development. The samples shall be analyzed for organochlorine pesticides (U.S. EPA Method 8080), arsenic (U.S. EPA Method 6010), and chlorinated herbicides (U.S. EPA Method 8150) by a State-certified laboratory; a minimum of four samples shall be collected. The sample results would provide information on the need for additional investigations at the site. The results shall be evaluated by a qualified environmental professional (e.g., Certified Industrial Hygienist) to determine whether measured chemicals could pose a hazard to future site users, construction workers, or the environment. If chemicals at the site could pose a hazard, a qualified professional shall conduct a risk assessment to quantify hazards based on the sampling results, and develop appropriate remediation measures, as necessary, to reduce potential risks to future site users and/or the environment, to acceptable levels. (LTS)

**Impact PHS-4: Construction operations during site development could result in hazardous materials releases at the site. (S)**

Grading activities would be conducted at the site using diesel-powered equipment; fueling and maintenance may occur on-site. Fueling and vehicle maintenance involve the use of petroleum hydrocarbons, motor oils, degreasing agents, and other hazardous materials. In addition, other hazardous materials (e.g., paints, curing agents) would be brought onto the site as part of site development. Transport, storage, or handling of these materials may result in releases of hazardous materials to the environment.

Mitigation Measure PHS-4: The contractor(s) performing grading and earthwork activities shall prepare a spill prevention plan for hazardous

materials to be used at the site during development activities. The plan shall be prepared prior to the start of earthwork activities, and be submitted to the City for review. The plan shall designate an on-site employee responsible for plan implementation, and include the following: 1) types and quantities of hazardous materials; 2) anticipated equipment needs and maintenance; 3) temporary hazardous materials storage areas; 4) emergency response procedures for hazardous materials releases; and 5) procedures for contacting designated regulatory agencies in the event of a hazardous materials release. (LTS)

**Impact PHS-5: Project operations could result in increased use, handling, and storage of pesticides, herbicides, and other hazardous materials at the golf course, vineyard, winery and resort. Uses at the site could potentially expose pesticide applicators, agricultural workers, golfers, residents and visitors to hazardous materials. (S)**

The proposed project would include the addition of businesses that would increase the volume of hazardous materials transported, stored, and used on-site. The golf course and vineyard may require use of pesticides, herbicides, fertilizer, and other chemicals for weed control; the winery may require use of ammonium and sulfates; and the resort may require use of swimming pool chemicals and other industrial cleaning chemicals. It is also likely that motor fuels, motor oils, and degreasers would be used and stored on-site for operation and maintenance of golf course maintenance and agricultural equipment. Hazardous materials (including pesticide) releases could occur during deliveries, materials handling, equipment failures, and transport to various areas of the site. Releases could also occur if these materials were stored in leaky or comprised containers, or if the containers ruptured or broke.

Numerous local, state, and federal statutes and regulations pertain to the proper transport, use, storage, and disposal of hazardous materials and wastes. Each business would have specific permit and reporting requirements pertaining to the unique use, storage, handling, and disposal activities associated with that business. These requirements would be in place during operation of the proposed project.

**Mitigation Measure PHS-5:** Compliance with the following would reduce this impact to a less-than-significant impact: 1) the appropriate federal and state regulations for employee training; 2) pesticide applicator training; 3) hazardous materials storage, labeling, hazardous materials inventories and permits; 4) pesticide use restrictions; and 5) pesticide application. (LTS)



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## Chapter V

### ALTERNATIVES TO THE PROPOSED PROJECT

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The *Draft Stanly Ranch Specific Plan (Draft SRSP)*, as proposed by the project applicant, has been described and analyzed in the previous chapters with an emphasis on potentially significant impacts and recommended mitigation measures to avoid these impacts. The following discussion is intended to inform the public and decision makers of *potentially* feasible alternatives to the proposed project which would attain most of the basic objectives of the project but would avoid or lessen any of the significant effects of the project.

This section analyzes the following four alternatives:

- The CEQA-required No Project Alternative which would maintain the current agricultural and viticultural uses of the site and a “Study Area” land use designation.
- An All Resort Alternative which would keep the resort elements currently proposed in the *Draft SRSP*, and add a second resort area to replace the residential component of the *Draft SRSP* with a 160-room hotel and conference center. This alternative was initially based on the All Resort/Golf concept presented to the City Council in 1992, then reduced in size to reduce impacts when compared to the proposed project. Carefree Resorts is a resort/residential developer, and has stated they would not be the resort operator in this alternative.
- An Agricultural Alternative which would provide for agricultural uses on all portions of the site where agriculture would be potentially feasible.
- An On-Site Wastewater System Alternative which would provide for on-site wastewater collection and treatment facilities in lieu of connection of Napa Sanitation District (NSD), should NSD capacity not be available to serve the project.
- A Reduced Density Alternative which would reduce the market rate housing units on the site by 30 percent.

For each alternative addressed, a brief project description is followed by a discussion of “Reduced and Adverse Impacts” for that particular alternative. The emphasis of the analysis is upon the alternative's comparison to the proposed project for identified, potentially significant impacts, and whether or not the alternative would reduce, eliminate, or create new significant impacts. A summary of the relationship of the alternatives’ impacts to the project’s impacts is provided in Table II-3 in Chapter II of the EIR.

According to CEQA Guidelines, the purpose of alternatives is to allow a reasoned comparison with the proposed project. Quantitative analysis on key issues, such as traffic impacts, has been included. At the request of the applicant, mitigation measures have been developed for the Wastewater Treatment Alternative, which are included in Appendix M.

## **A. No Project Alternative**

### **1. Principal Characteristics**

The 918-acre project site is currently used for low-intensity agricultural uses that include cattle grazing and limited viticulture. Approximately one acre of the site is in farm-related residential use. A vineyard comprises 104 acres of the site, with grazing occurring on the remainder. These uses and the site’s rural visual character would continue to exist on the site under the No Project Alternative.

Under CEQA, the No Project Alternative generally discusses existing conditions as well as what would reasonably be expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services. The “Study Area” designation of the City’s *General Plan* does not presently allow any development, but does embody, to a degree, an expectation that some level of urban development will ultimately occur on the project site. Such development would likely have impacts similar to those of either the project or one of the alternatives. Because no purpose would be served by speculating as to how future development scenarios might differ from those already analyzed in the EIR, the impact analysis for the No Project Alternative focuses on current conditions rather than potential future conditions. It is assumed that existing eucalyptus trees would remain on most portions of the site under the No Project Alternative; however, trees along Stanly Lane may be removed.

The No Project Alternative would not meet the applicant’s objectives of developing a destination resort and residential community or most City objectives described in Chapter III.

## **2. Reduced and Adverse Impacts**

- a. Land Use. The No Project Alternative would eliminate potential impacts of the proposed project associated with conflicts with adjacent agricultural operations and complaints related to aircraft operations. No adverse land use impacts would occur as identified for the proposed project.
- b. Public Policy. Under the No Project Alternative, conflicts with public policy could occur related to the following: Rural Urban Limit (RUL) policies which promote urban development within the RUL and maintenance of greenbelts beyond the RUL; identification of appropriate land uses for the project site given its "Study Area" designation; housing policies which promote maintenance of a sufficient supply of land designated for residential development to meet quantified housing needs; policies promoting provision of planned trails, and protection of water quality and wetlands.

A basic premise of the RUL line, adopted in 1975, is that urban development belongs in the City and that lands outside the RUL should be protected for agricultural uses. Stanly Ranch is a major undeveloped site within the City's RUL. To conclude that existing land use/no urban development is appropriate on this site could call into question this basic policy approach.

Second, the "Study Area" designation in the current *General Plan* is intended to be an interim step in identifying an appropriate land use. The No Project Alternative does not provide a viable, *long-term* public policy approach to land use as there is no land use designation.

Third, State housing law requires that cities maintain adequate sites to meet housing needs. Eliminating Stanly Ranch as a future housing site may necessitate other adjustments elsewhere in the City to assure that long-term housing needs can continue to be met. Additionally, the No Project Alternative would not help implement plans for future multi-use trails. Policies related to water quality and wetland protection may not be met due to continued grazing.

In comparison to the proposed project, the No Project Alternative would have more adverse impacts related to the above policies, but reduced impacts related to environmental policies covering circulation; air quality; urban/rural conflicts; and others such as adequate provision of wastewater treatment services. Many policies which deal with designing or reviewing development projects are simply not applicable to the No Project Alternative.



c. Transportation and Circulation. The No-Project Alternative would add no additional traffic to the transportation system, and would allow critical intersections analyzed to absorb more traffic from other sources. As no additional traffic would be generated with this alternative, there would be no significant transportation impacts related to level of service (LOS) when compared to the proposed project. However, as shown in Table II-3, significant impacts related to LOS at specific locations would remain even without the project.

d. Geology, Soils and Seismicity. Under the No Project Alternative, the geologic and seismic hazards to existing land uses would be minimal. Relative to the proposed project, the potential for damage to improvements related to seismic shaking (and related effects, such as liquefaction) would be substantially reduced, particularly because no new structures would be placed in areas underlain by bay mud or young alluvial sediments. No adverse geologic, soil or seismic impacts would occur under the No Project Alternative as compared to the proposed project.

e. Hydrology, Drainage and Water Quality. Under the No Project Alternative, existing drainage patterns, runoff volumes, and runoff velocities would remain unchanged. Similarly, water quality of runoff would not be altered by increased on-site uses. These characteristics reduce the hydrology and water quality impacts relative to the proposed project. Under the No Project Alternative, the continued use of the site for agriculture (grazing and vineyards) would result in a continuing release of agricultural chemicals and animal waste which could cause water quality degradation. No Storm Water Prevention Plan (SWPP) would be developed for the site. These characteristics could result in an increased potential for water quality degradation related to agricultural activities, relative to the proposed project. No levee trail impacts would occur.

f. Biological Resources. The No Project Alternative would result in fewer biological impacts than the proposed project. Fill and other direct impacts to wetlands would not occur. Indirect impacts to wetlands from grazing and viticultural uses would remain. Grazing in the wetlands would continue to degrade the wetland habitat. When compared with the proposed project, this one impact would be greater than that of the proposed project. Raptor perching and nesting habitat would be much less affected. Impacts to the native California oatgrass grassland would not occur. All existing corridors would remain for the movement of wildlife between the Napa River and areas beyond the Stanly Ranch site. Foraging habitat for special-status raptors and other species of birds would remain largely unaffected with this alternative.

g. Historic and Cultural Resources. Potential archaeological impacts associated with new development would not occur under the No Project Alternative. The Stanly House and the four related historic buildings nearby would not be moved or demolished as a result of this alternative; however, they would continue to deteriorate unless renovation efforts are undertaken. The cistern would not be altered. The bridges on Stanly Lane would not be altered or rebuilt. The eucalyptus trees along Old Suscol Road and lateral interior windrows would not be removed and replaced with other trees. However, their physical condition would continue to deteriorate. City Community Resources staff would continue to evaluate health/safety hazards posed by the trees within the Stanly Lane public right-of-way, and may remove trees or consider other alternatives such as closing Stanly Lane. The deteriorating condition of the trees would adversely affect the historic value of the eucalyptus windrows along Stanly Lane and Old Suscol Road. The tree impacts would be more adverse than the proposed project long-term due to mitigation measures proposed as part of the project.

h. Visual Quality. With the No Project Alternative, no impact related to views of development within the site would occur. The consistency of the site with the rural character of surrounding development would remain. Adverse visual impacts would be limited to the potential ongoing deterioration of existing eucalyptus, as mentioned above under Historic and Cultural Resources.

i. Population, Employment and Housing. The City would not gain employment or housing opportunities for residents and others. No low income employee housing would be provided.

j. Public Services. There would be no need to extend or expand public services if no additional development occurred on the site. The No Project Alternative would not further City plans to provide public trails on the site, or generate tax revenue for the City's General Fund to assist in expanding or upgrading City services for police and fire protection, and parks and recreation facilities elsewhere in the City.

k. Public Utilities. Under the No Project Alternative, the one-acre, farm-related residential area and vineyard would continue to receive water from the City of Napa Water System (City) through the 36-inch water main which is located south and parallel to Highway 29/12, although the owners state it is possible that they may elect to reactivate existing on-site water wells. The remaining 745 acres of the project site would not require irrigation. There would be no net increase in demand on City water supplies, similar to the proposed project, and no adverse impacts.

Wastewater generated from the farm-related residential areas would continue to be discharged to a septic tank-leach field system, which would continue to be operated pursuant to the regulatory requirements of the Napa County Department of

Environmental Management. Wastewater would not be disposed to the Napa Sanitation District (NSD), as proposed for the proposed project. Compared to the proposed project, the No Project Alternative would not have the potential to exacerbate existing overloaded conditions experienced at the NSD treatment plant. Reclaimed water from NSD would not be extended to the site, unless NSD undertook this project.

l. Noise. Under the No Project Alternative, no noise sensitive land uses would be introduced into the area and no additional new noise would be generated.

m. Air Quality. The No Project Alternative would avoid the construction-related and permanent local and regional air quality impacts associated with the proposed project. There would be no adverse air quality impacts would occur under the No Project Alternative.

n. Public Health and Safety. Under the No Project Alternative, as no construction and demolition activities would occur, the impacts associated with construction activities for the proposed project would also not occur. Under the No Project Alternative, hazardous materials (i.e., pesticides, herbicides, petroleum products) would continue to be stored, used and handled on-site. Based on previous site reconnaissance, current hazardous materials storage practices are inadequate to ensure public health and safety. Additionally, it is unclear whether hazardous materials business plan requirements are currently being met. However, relative to the proposed project, the No Project Alternative would not result in any public health and safety impacts which are not currently present at the project site.

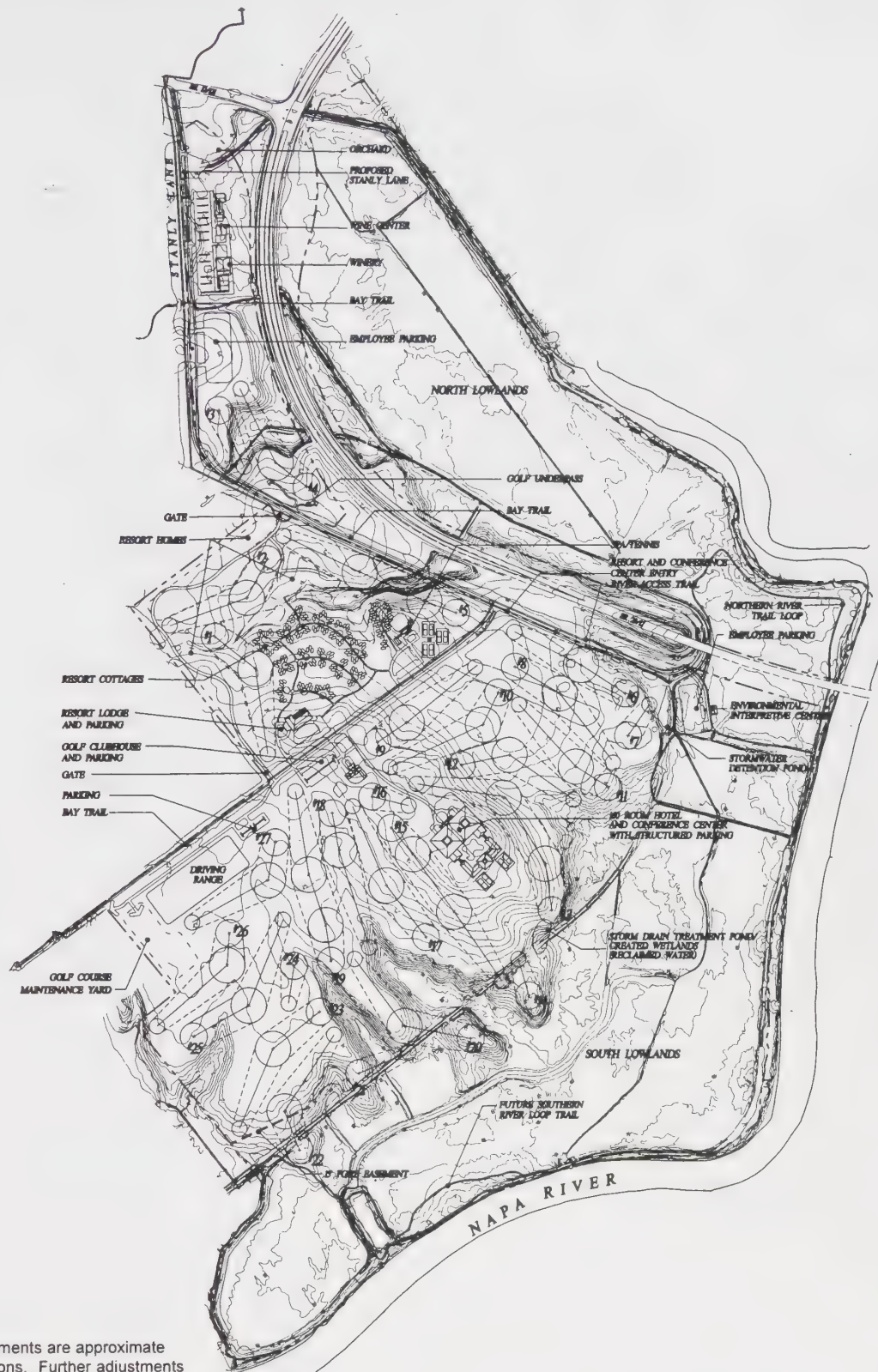
## **B. All Resort Alternative**

### **1. Principal Characteristics**

This alternative assumes two separate resort operations occurring on the Stanly Ranch property. Resort A would be located generally northwest of Old Suscol Road although the golf clubhouse, parts of the golf course, maintenance facilities and employee parking would be located south of Old Suscol Road. Resort A would have the same program and layout as the resort area in the *Draft SRSP*. However, as noted on page V-1 of the EIR, Carefree Resorts has stated they would not be the resort operator. Resort B would be located southwest of Old Suscol Road on lands that are designated as residential in the *Draft SRSP*. The plan for the All Resort Alternative is shown in Figure V-1.

Resort A is intended as a destination resort, and would offer a full recreation amenity package for guests, including 27 holes of golf (as compared to 18 holes for the





Note: Plan elements are approximate sizes and locations. Further adjustments will occur at the Tentative Map Phase.

Source: EDAW, 1997.

# **STANLEY RANCH** **SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT**

Figure V-1  
Alternative B: All Resort Alternative

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PLANNERS AND LANDSCAPE ARCHITECTS

proposed project), along with spa uses and tennis facilities. Guests would stay in 200 separate rental cottages, and 100 resort units. They would find dining, small conference facilities, and retail shopping opportunities in a central lodge facility. The 100 resort units would include 25 larger units belonging to the owner/operator, available to participating members only, and 75 resort homes. Parking for this resort would be located at the main lodge adjacent to the golf clubhouse. Valet parking would be provided for the cottage units and included in the larger units. Employee parking would occur at the terminus of Stanly Lane. No employee housing is proposed with this alternative.

Resort B would consist of a 160-room hotel and conference center that would be available for both large and small groups. In general, since this resort would cater to conference attendees, guests at Resort B would stay for shorter lengths of time than those guests staying at Resort A. The conference facility would be located on Home Hill (see Figure V-1) and would not exceed 35 feet in height. This location would maximize views of the surrounding golf course, vineyards, the Napa River, and the hills surrounding the Napa Valley. The central structure would contain the following: primary meeting spaces (ballrooms, meeting rooms, break-out rooms, auditorium, etc.); several restaurants and lounges; administration space; indoor recreation courts; and structured parking facilities.

The conference building could contain up to four levels, including two levels of structured parking below grade, with the remaining two levels above grade housing the conference, restaurants, and support facilities. The guest rooms would be connected to the central building through covered corridors and would be about three stories, not exceeding 35 feet in height. Employee parking, in addition to that provided for Resort A, would be accommodated between the winery and golf course holes numbers 3 and 4. Outdoor facilities at Resort B would include tennis courts, a swimming pool, and gardens.

As in the *Draft SRSP*, a wine center and winery would be built in the panhandle portion of the property adjacent to Stanly Lane near the SR 12/121 interchange. The wine center would include restaurant and retail/commercial opportunities oriented to visitors destined for the Napa and Sonoma valleys. A small winery would be built adjacent to the wine center.

Bay Trail and River Access Trail alignments as proposed in the *Draft SRSP* would remain unchanged in this alternative. Emergency Vehicle Access (EVA) and emergency egress would occur at Cuttings Wharf Road as with the *Draft SRSP*. Table V-1 outlines the program for the All Resort Alternative.

While this alternative would meet some of the applicant's objectives related to development of a destination resort, it would not meet the objective of combining

**Table V-1**  
**STANLY RANCH ALL RESORT ALTERNATIVE**

Land Use	Program	Size (sq.ft.)	Acres
<b>HIGHLANDS</b>			
<b>Wine Center</b>		40,000	6
<b>Winery</b>		40,000	6
<b>RESORT A (Primarily Northwest of Old Suscol Rd)</b>			58
<b>Main Lodge</b>			
Restaurant(s)	220 seats	12,000	
Retail		1,200	
Conference Facility (ballroom and meeting rooms)		14,000	
Miscellaneous Support		18,000	
Spa (treatment rooms, exercise rooms, & retail services)		12,000	
Golf Course (27 holes plus driving range)			250
Clubhouse		11,000	
Restaurant(s)	170 seats	4,600	
Golf shop		1,200	
Misc. support (cart storage, lockers)		5,200	
Maintenance		4,500	
Guest Cottages	200 rooms	160,000	
Time Share Units	25 units	45,000	
Resort Homes	75 units	172,500	
Employee Parking and Interpretive Center	200 spaces		2
<i>Subtotal Resort A (minus employee lot in Lowlands)</i>		<i>450,200</i>	<i>322</i>
<b>RESORT B (Southeast of Old Suscol Road)</b>			19
Guestrooms	160 rooms	80,000	
Conference and Training (ballrooms, meeting/breakout rooms)		75,000	
Public Areas (lobby/lounges)		30,000	
Restaurant(s)		20,000	
Recreation (racquet ball/squash/pool)		25,000	
Administration/Service		75,000	
Structured Parking	300 spaces	96,000	
Employee Parking	225 spaces		3
<b>Subtotal Resort B</b>		<b>401,000</b>	<b>22</b>
Major Roads (incl. ROW)			18
Vineyards & Landscape Buffers			133
<b>Subtotal Highlands</b>		<b>931,200</b>	<b>493</b>
<b>LOWLANDS</b>			
Open Space			425
<b>Subtotal Lowlands</b>			<b>425</b>
<b>TOTAL STANLY RANCH</b>			<b>918</b>

Source: EDAW, 1997



the resort with a residential community in order to be financial feasible. This alternative appears to meet most City objectives.

## **2. Reduced and Adverse Impacts**

a. Land Use. Potential land use conflicts related to residential uses adjacent to agricultural uses, as identified for the proposed project, would be less with the All Resort Alternative due to the fact that on-site visitors would be transient and would not be as likely to be bothered by agricultural operations as full-time residents. This same difference would apply to potential complaints associated with aircraft. These impacts would remain significant under the All Resort Alternative but would be substantially reduced from those of the proposed project.

b. Public Policy. The All Resort Alternative could conflict with City goals regarding provision of affordable housing, as no employee housing would be expected to be proposed in this alternative (although the City could still negotiate for such units). In addition, the 600 residential units allocated for the site in the *City's Draft Policy Document* would not be constructed, thus exacerbating the Countywide trend toward having more jobs than housing or employed residents. Other public policy conflicts would be similar to the proposed project.

c. Transportation and Circulation. Trip generation for the project alternatives has been developed jointly with City staff. The trip generation rates reflect data similar to that assumed for the components of the proposed project. However, the golf course has increased from 18 to 27 holes for the All Resort Alternative. Further, the conference center is assumed to attract attendees from off-site. While the exact amount of off-site travel is unknown, it is estimated that up to 50 percent of the capacity of the conference facility could be used by off-site visitors. Tables V-2 through V-7 show the AM, PM and weekend trip generation for the All Resort Alternative. These tables also provide the traffic generation for the proposed project and the All Resort Alternative.

The tables indicate that for each of the three peak periods, the traffic generated by the All Resort Alternative is less on both a daily and peak hour basis than the proposed project. The intersection impacts are also lower than those identified for the proposed project but would remain significant without mitigation; and potentially significant with mitigation. Construction traffic would remain significant.

d. Geology, Soils and Seismicity. Relative to the proposed project, the All Resort Alternative would not specifically reduce or eliminate significant geologic or seismic impacts related to development at the project site. As with the proposed project, no structures would be proposed within the recommended setback zones for the lineaments identified at the site along the West Napa Fault (Joyce Associates, 1993), reducing the potential for fault rupture to a less-than-significant level. The

**Table V-2**  
**WEEKDAY AM PEAK HOUR TRIP GENERATION COMPUTATIONS**  
**(ALL RESORT ALTERNATIVE)**

Land Use	Unit Type	Number of Units	Adjustment Factor <sup>a</sup>	Adjusted Units	Trip Generation Rates		In/Out Split		Trips		
					Daily	AM Peak Hour	In	Out	Daily	AM Peak Hour	
										In	Out
Resort											
Guest Cottages	Dwelling Units	200									
Carefree Units		25									
Resort Homes		75									
Guestrooms		160									
Total Units		460	0.85	391	10.16	0.33	0.60	0.40	3,973	77	52
Restaurants Resort A	Seats	390	0.5	195	2.86	0.03	0.94	0.06	560	6	0
Restaurants Resort B	Seats	370	0.5	185	2.86	0.03	0.94	0.06	530	6	0
Conference/Training Center	Attendees <sup>b</sup>	300	0.5	150	4.00	1.00	0.80	0.20	600	160	40
Golf Course/Club House	Holes	27	0.5	14	37.59	3.22	0.83	0.17	526	37	8
Wine Center	KSF <sup>c</sup>	40	0.8	32	40.57	Closed	0.00	0.00	1,300	0	0
Winery	Winery	1		1	80.00	Closed	0.00	0.00	80	0	0
Total for Alternative									7,569	246	90
Comparative Total for Proposed Project									10,243	194	365

<sup>a</sup> Adjustment factors are taken from the Korve Engineering Trip Generation analysis and are as follows: 85 percent applied to the resort on the assumption that a maximum of 85 percent of the rooms would be occupied at any one time; 50 percent applied to the restaurant and golf course on assumption that 50 percent of trips would be internal to the project and not distributed onto the public roadway system; 80 percent applied to the wine center on the assumption that 20 percent of the trips would be internal and not distributed onto the public roadway system.

<sup>b</sup> Attendee potential = 75,000 square feet of conference center/ 250 square feet per person = 300 people.

<sup>c</sup> KSF = thousand square feet.

**Table V-3**  
**WEEKDAY PM PEAK HOUR TRIP GENERATION COMPUTATIONS**  
**(ALL RESORT ALTERNATIVE)**

Land Use	Unit Type	Number of Units	Adjustment Factor <sup>a</sup>	Adjusted Units	Trip Generation Rates		In/Out Split		Trips		
					Daily	AM Peak Hour	In	Out	Daily	PM Peak Hour	
										In	Out
Resort	Dwelling Units										
Guest Cottages		200									
Carefree Units		25									
Resort Homes		75									
Guestrooms		<u>160</u>									
Total Units		460	0.85	391	10.16	0.48	0.37	0.63	3,973	70	118
Restaurants Resort A	Seats	390	0.5	195	2.86	0.23	0.70	0.30	560	32	13
Restaurants Resort B	Seats	370	0.5	185	2.86	0.23	0.70	0.30	530	30	13
Conference/Training Center	Attendees <sup>b</sup>	300	0.5	150	4.00	1.00	0.20	0.80	600	30	120
Golf Course/Club House	Holes	27	0.5	14	37.59	3.38	0.52	0.48	526	24	23
Wine Center	KSF <sup>c</sup>	40	0.8	32	40.57	4.93	0.57	0.43	1,300	90	68
Winery	Winery	1		1	80.00	16.00	0.31	0.69	80	5	11
Total for Alternative									7,569	288	366
Comparative Total for Proposed Project									10,243	564	389

<sup>a</sup> Adjustment factors are taken from the Korve Engineering Trip Generation analysis and are as follows: 85 percent applied to the resort on the assumption that a maximum of 85 percent of the rooms would be occupied at any one time; 50 percent applied to the restaurant and golf course on assumption that 50 percent of trips would be internal to the project and not distributed onto the public roadway system; 80 percent applied to the wine center on the assumption that 20 percent of the trips would be internal and not distributed onto the public roadway system.

<sup>b</sup> Attendee potential = 75,000 square feet of conference center/ 250 square feet per person = 300 people.

<sup>c</sup> KSF = thousand square feet.



**Table V-4**  
**WEEKEND PEAK HOUR TRIP GENERATION COMPUTATIONS**  
**(ALL RESORT ALTERNATIVE)**

Land Use	Unit Type	Number of Units	Adjustment Factor <sup>a</sup>	Adjusted Units	Trip Generation Rates		In/Out Split		Trips		
					Daily	AM Peak Hour	In	Out	Daily	Weekend Peak Hour	
										In	Out
Resort											
Guest Cottages	Dwelling Units	200									
Carefree Units		21									
Resort Homes		77									
Guestrooms		160									
Total Units		460	0.85	391,306	11.25	0.8	0.47	0.53	4,399	115,147	166
Restaurants Resort A	Seats	390	0.5	195	2.74	0.32	0.53	0.47	535	91	80
Restaurants Resort B	Seats	370	0.5	185	2.74	0.32	0.53	0.47	507	31	28
Conference/Training Center	Attendees <sup>b</sup>	300	0.5	150	4.00	1	0.50	0.50	600	75	100
Golf Course/Club House	Holes	27	0.5	14	42.43	4.6	0.72	0.28	594	46	18
Wine Center	KSF <sup>c</sup>	40	0.8	32	45.91	10.13	0.50	0.50	1,469	162	162
Winery	Winery	1		1	195	39	0.50	0.50	195	20	19
Total for Alternative									8,299	572	548
Comparative Total for Proposed Project									11,135	651	596

<sup>a</sup> Adjustment factors are taken from the Korve Engineering Trip Generation analysis and are as follows: 85 percent applied to the resort on the assumption that a maximum of 85 percent of the rooms would be occupied at any one time; 50 percent applied to the restaurant and golf course on assumption that 50 percent of trips would be internal to the project and not distributed onto the public roadway system; 80 percent applied to the wine center on the assumption that 20 percent of the trips would be internal and not distributed onto the public roadway system.

<sup>b</sup> KSF = thousand square feet.

<sup>c</sup> Attendee potential = 75,000 square feet of conference center/ 250 square feet per person = 300 people

**Table V-5**  
**COMPARISON OF SERVICE LEVELS FOR THE AM PEAK HOUR**  
**(ALL RESORT ALTERNATIVE)**

Intersection	Existing Conditions			Existing-Plus-Project			Cumulative Conditions			Cumulative-Plus-Project		
	LOS <sup>a</sup>	D/V <sup>b</sup>	V/C <sup>c</sup>	LOS	D/V	V/C	LOS	D/V	V/C	LOS	D/V	V/C
Old Sonoma Road & SR 12/121	C	1.3	NC <sup>d</sup>	C	1.3	NC	E	4.3	NC	E	4.5	NC
Cuttings Wharf Road & SR 12/121	C	0.9	NC	C	1	NC	D	1.5	NC	E	1.6	NC
Stanly Lane & SR 12/121	F	0.5	NC	<i>B<sup>e</sup></i>	7.7	0.487	F	1.4	NC	<i>B<sup>e</sup></i>	7.8	0.627
SR 12/121/29	C	15.4	0.721	C	16	0.758	D	25.3	0.974	D	29.8	1.011
SR 221 & SR 29	E	40.9	0.8	E	41.1	0.806	F	72.9	0.98	F	75.3	0.986
Imola Avenue & Coombs Street	C	21.5	0.56	C	20.3	0.582	C	21.8	0.683	C	21.7	0.708
Imola Avenue & Jefferson Street	C	19.4	0.475	C	19.5	0.479	C	21.3	0.633	C	21.6	0.637
Imola Avenue & SR 29 Northbound Ramps	F	4	NC	<b>F</b>	<b>4.8</b>	<b>NC</b>	<b>F</b>	<b>33.8</b>	<b>NC</b>	<b>F</b>	<b>45.4</b>	<b>NC</b>
Imola Avenue & SR 29 Southbound Ramps	F	85.9	1.336	F	77.5	1.307	F	272.6	1.644	F	239.2	1.608
Foster Road & Golden Gate Drive	A	2	NC	A	1.9	NC	A	1.8	NC	A	1.8	NC
Imola Avenue & Golden Gate/South Freeway Drives	C	3.6	NC	C	3.7	NC	E	6.4	NC	E	6.5	NC
Imola Avenue & Foster Road	B	5.6	0.565	B	5.6	0.564	F	265.2	1.651	F	244.6	1.629
Foster Road & Old Sonoma Road	A	1.5	NC	A	1.5	NC	B	1.7	NC	B	1.7	NC

<sup>a</sup> LOS = Level of Service

<sup>b</sup> D/V = Average Delay per Vehicle in Seconds

<sup>c</sup> V/C = Volume/Capacity Ratio

<sup>d</sup> NC = V/C Ratio Not Computed for 2-Way Stop Sign

<sup>e</sup> LOS with Project-Proposed Signal

Note: **Boldface Text** indicates significant adverse impact.  
*Italic Text* indicates beneficial impact.

Source: Dowling Associates, 1998.

**Table V-6**  
**COMPARISON OF SERVICE LEVELS FOR THE PM PEAK HOUR**  
**(ALL RESORT ALTERNATIVE)**

Intersection	Existing Conditions			Existing-Plus-Project			Cumulative Conditions			Cumulative-Plus-Project		
	LOS <sup>a</sup>	D/V <sup>b</sup>	V/C <sup>c</sup>	LOS	D/V	V/C	LOS	D/V	V/C	LOS	D/V	V/C
Old Sonoma Road & SR 12/121	D	2.6	NC <sup>d</sup>	E	2.9	NC	F	899.2	NC	F	>1,000	NC
Cuttings Wharf Road & SR 12/121	C	1.3	NC	D	1.3	NC	F	2.7	NC	F	3	NC
Stanly Lane & SR 12/121	F	1	NC	<i>B<sup>c</sup></i>	<i>13.6</i>	<i>0.648</i>	F	8.7	NC	<i>B<sup>c</sup></i>	<i>14.1</i>	<i>0.812</i>
SR 12/121/29	C	15.2	0.874	C	19.6	0.942	<b>E</b>	<b>54</b>	<b>1.145</b>	F	<b>88.2</b>	<b>1.03</b>
SR 221 & SR 29	F	72.3	1.002	F	78.5	1.021	F	579.6	1.466	F	632.2	1.485
Imola Avenue & Coombs Street	E	47	1.015	E	51.1	1.037	F	148	1.296	F	162.7	1.323
Imola Avenue & Jefferson Street	C	22	0.642	C	22.7	0.692	D	26.9	0.849	D	29.8	0.896
Imola Avenue & SR 29 Northbound Ramps	F	69.4	NC	<b>F</b>	<b>91.1</b>	<b>NC</b>	<b>F</b>	<b>285.4</b>	<b>NC</b>	<b>F</b>	<b>388.4</b>	<b>NC</b>
Imola Avenue & SR 29 Southbound Ramps	F	58.6	1.443	F	51.1	1.417	F	127.3	1.774	F	107.8	1.742
Foster Road & Golden Gate Drive	A	1.6	NC	A	1.6	NC	A	1.4	NC	A	1.5	NC
Imola Avenue & Golden Gate/South Freeway Drives	C	2.9	NC	C	3	NC	D	6.8	NC	D	7.1	NC
Imola Avenue & Foster Road	A	2.6	0.295	A	2.7	0.305	C	13	0.823	C	11.8	0.772
Foster Road & Old Sonoma Road	B	1.9	NC	B	2	NC	B	2.6	NC	B	2.8	NC

<sup>a</sup> LOS = Level of Service<sup>b</sup> D/V = Average Delay per Vehicle in Seconds<sup>c</sup> V/C = Volume/Capacity Ratio<sup>d</sup> NC = V/C Ratio Not Computed for 2-Way Stop Sign<sup>e</sup> LOS with Project-Proposed SignalNote: **Boldface Text** indicates significant adverse impact.*Italic Text* indicates beneficial impact.

Source: Dowling Associates, 1998.



**Table V-7**  
**COMPARISON OF SERVICE LEVELS FOR THE WEEKEND PEAK HOUR**  
**(ALL RESORT ALTERNATIVE)**

Intersection	Existing Conditions			Existing-Plus-Project			Cumulative Conditions			Cumulative-Plus-Project		
	LOS <sup>a</sup>	D/V <sup>b</sup>	V/C <sup>c</sup>	LOS	D/V	V/C	LOS	D/V	V/C	LOS	D/V	V/C
Old Sonoma Road & SR 12/121	F	3.3	NC <sup>d</sup>	F	5.6	NC	F	>1,000	NC	F	>1,000	NC
Cuttings Wharf Road & SR 12/121	D	1.8	NC	E	2.5	NC	<b>F</b>	<b>4.9</b>	<b>NC</b>	<b>F</b>	<b>9</b>	<b>NC</b>
Stanly Lane & SR 12/121	F	2.4	NC	<i>C<sup>e</sup></i>	<i>21</i>	<i>0.881</i>	F	31.8	NC	<i>D<sup>e</sup></i>	<i>25.1</i>	<i>0.94</i>
SR 12/121/29	C	17.4	0.764	C	21	0.895	D	27.2	0.984	E	55.3	1.116
SR 221 & SR 29	E	42.2	0.819	E	45.2	0.857	F	181.5	1.141	F	218.6	1.179
Imola Avenue & Coombs Street	D	26.1	0.675	D	25.9	0.707	D	29.3	0.819	D	30.1	0.851
Imola Avenue & Jefferson Street	C	21.9	0.457	C	22.9	0.544	C	23.7	0.606	C	24.7	0.687
Imola Avenue & SR 29 Northbound Ramps	E	2.3	NC	E	2.9	NC	<b>F</b>	<b>3.6</b>	<b>NC</b>	<b>F</b>	<b>51</b>	<b>NC</b>
Imola Avenue & SR 29 Southbound Ramps	C	11.1	0.808	C	10.1	0.786	C	11.6	1.033	C	10.6	1.002
Foster Road & Golden Gate Drive	A	1.6	NC	A	1.6	NC	A	1.4	NC	A	1.4	NC
Imola Avenue & Golden Gate/South Freeway Drives	C	4.1	NC	C	4.3	NC	F	12.2	NC	F	13.5	NC
Imola Avenue & Foster Road	A	2.8	0.318	A	2.9	0.322	C	18.7	0.931	C	17.4	0.907
Foster Road & Old Sonoma Road	B	1.5	NC	B	1.6	NC	B	1.9	NC	B	2	NC

<sup>a</sup> LOS = Level of Service

<sup>b</sup> D/V = Average Delay per Vehicle in Seconds

<sup>c</sup> V/C = Volume/Capacity Ratio

<sup>d</sup> NC = V/C Ratio Not Computed for 2-Way Stop Sign

<sup>e</sup> LOS with Project-Proposed Signal

Note: **Boldface Text** indicates significant adverse impact.

*Italic Text* indicates beneficial impact.

Source: Dowling Associates, 1998.

proposed structures and improvements would not be located in areas of significant slope instability or adverse soil conditions, other than the small Environmental Interpretive Center, trails, or infrastructure as in the proposed project. The All Resort Alternative would involve construction of resort buildings and other improvements within a seismically-active region of northern California and would be similar to the proposed project.

e. Hydrology, Drainage and Water Quality. None of the identified impacts related to hydrology and water quality for the proposed project would be reduced by the All Resort Alternative. Relative to the proposed project, expanded resort-related land uses, including a larger 27-hole golf course and a multi-story conference center (and associated parking) would likely result in increased degradation of storm water runoff quality. Groundwater could be encountered during construction-related excavation for Resort B for buildings and the parking structure, possibly requiring temporary or permanent dewatering, a condition not expected for the proposed project, but this would not be a significant impact. Discharge of the pumped groundwater would require compliance with applicable local or state requirements. Impacts related to water quality and levee safety would be similar to the proposed project.

f. Biological Resources. The adverse impacts of this alternative are very similar to those of the proposed project. However, the enlarged golf course could impact more wetlands and valuable habitat.

g. Historic and Cultural Resources. The All Resort Alternative would not result in any reduced or more adverse impacts to historic and cultural resources than would occur under the proposed project.

h. Visual Quality. Fewer structures would be visible from proposed scenic corridors with the All Resort Alternative. Assuming similar tree screening would occur with this alternative as for the proposed project, overall visual impacts would be reduced to a less than significant level after mitigation. The change in visual character from rural to urban would remain significant.

i. Population, Employment and Housing. The All Resort Alternative would result in the creation of more jobs as compared to the proposed project but no housing units, requiring that all employees commute from off-site locations. Additionally, there would be a loss of up to 540 housing units with the potential to serve the local area workforce. As for the proposed project, no significant impacts would occur related to population, employment and housing.

j. Public Services. School and park and recreation impacts would be reduced under this alternative due to lack of permanently occupied homes. Other impacts related to public services, would be similar to the proposed project. Also, similar to the proposed project, implementation of the All Resort Alternative would increase demand for police and fire protection beyond current capacities, necessitating a new fire station and additional police, but would be expected to generate significant new revenue to fund such services.

k. Public Utilities. There would be no reduced public utilities impacts associated with the All Resort Alternative compared to the proposed project. The All Resort Alternative would obtain potable water supply from the City and reclaimed water would be used to irrigate portions of the project site. The projected average potable water demand for this alternative would be approximately 0.19 mgd, which is lower than the proposed project by 0.09 mgd. Similar to the proposed project, the potable water demand would be largely offset through the City's retrofit program, but the project may not completely offset new water demand through voluntary additional retrofits. Voluntary retrofits are highly unusual. If voluntary retrofits were not proposed, water supply impacts would be significant and more adverse than the project (Table 8). The demand for reclaimed water would be greater with this alternative due to the enlarged golf course, vineyard and buffer areas. As with the proposed project, NSD would be looked to as a potential source for reclaimed water. NSD needs additional reclaimed water use receiving sites.

The projected average wastewater generated by this alternative would be approximately 0.19 mgd (Table 9). Wastewater generated would be discharged to the NSD treatment plant. Similar to the proposed project, the alternative's wastewater flows could be reduced by 0.024 mgd through the use of on-site water saving devices and by 0.099 mgd through compliance with the City's Retrofit program. However, as with the proposed project, implementation of voluntary retrofits<sup>1</sup> (which are unlikely) would also be necessary in order to completely off-set the estimated wastewater generated by the project otherwise an increase in wastewater flow to the NSD treatment plant could exacerbate the overloaded conditions experienced at the NSD wastewater treatment plant during wet weather periods until NSD implements planned improvements. This would likely be an adverse impact compared to the proposed project.

l. Noise. Under the All Resort Alternative, the residential portion of the project would be replaced by a 160-room hotel/conference center located on Home Hill. The hotel would be located outside the 60 L<sub>dn</sub> contour and would require no noise mitigation. Traffic noise impacts would be less than significant but the project's

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<sup>1</sup> The applicant would need to perform about 1,120 voluntary retrofits.



**Table V-8  
ESTIMATED AVERAGE WATER DEMAND  
FOR ALL RESORT AND REDUCED DENSITY ALTERNATIVES  
(mgd)**

	<b>All Resort Alternative</b>	<b>Agricultural Alternative<sup>a</sup></b>	<b>Reduced Density Alternative</b>
Total Estimated Average Daily Water Demand	0.63	0.59	0.63
Average Daily Reclaimed Water Demand	0.44	0	0.4
ADPWD	0.19	0.59	0.23
Existing On-Site ADPWD	<0.019>	<0.019>	<0.019>
Net Additional ADPWD without Implementation of On-Site Water Savings	0.17	0.57	0.21
On-Site Potable Water Savings/Reduction through use of Water Saving Devices	<0.021>	0	<0.038>
Off-Site Water Savings from Implementation of Required Retrofits	<0.099>	NA	<0.17>
Additional Voluntary Retrofits Needed to "Net Out" Additional Demand	0.051	NA	<0.00>

<sup>a</sup> Reflects use of City water supply for vineyard irrigation of 0.05 mgd.

Notes: ADPWD = Average Daily Potable Water Demand  
mgd = million gallons per day  
NA = Not Applicable  
<xx> = reflects proposed water savings or reflects existing ADPWD

Source: BASELINE Environmental Consulting, July 1998.

**Table V-9  
ESTIMATED DAILY WASTEWATER FLOWS  
FOR ALL RESORT AND REDUCED DENSITY ALTERNATIVES  
(mgd)**

	<b>All Resort Alternative</b>	<b>Reduced Density Alternative</b>
Total Estimated Daily Wastewater Flow	0.19	0.23
On-Site Daily Wastewater Flow Reduction from Use of Water Saving Devices	<0.024>	<0.042>
Off-Site Daily Wastewater Flow Reduction from Implementation of Required Retrofits	<0.099>	<0.17>
Additional Voluntary Retrofits Needed to "Net Out" Increased Daily Wastewater Flow	0.067	0.018

Notes: mgd = million gallons per day  
<xx> = reflects wastewater flow reduction to NSD Facility

Source: BASELINE Environmental Consulting, July 1998.

significant impacts related to agricultural operations, and Stanly Lane would also be significant under the All Resort Alternative, though slightly reduced.

m. Air Quality. This alternative would have construction-related air quality impacts. Similar to that of the proposed project, local carbon monoxide impacts, which are proportional to peak-hour trip generation, would be slightly less than those of the proposed project. This alternative would result in about 148 pounds per day of ROG, 211 pounds per day of NO<sub>x</sub>, and 67 pounds per day of PM<sub>10</sub>. These totals are 14 - 23 percent less than for the proposed project, depending on the pollutant. Air quality emissions would exceed the BAAQMD's thresholds of significance for ROG and NO<sub>x</sub>. As for the proposed project, this alternative would have a significant adverse impact on regional air quality.

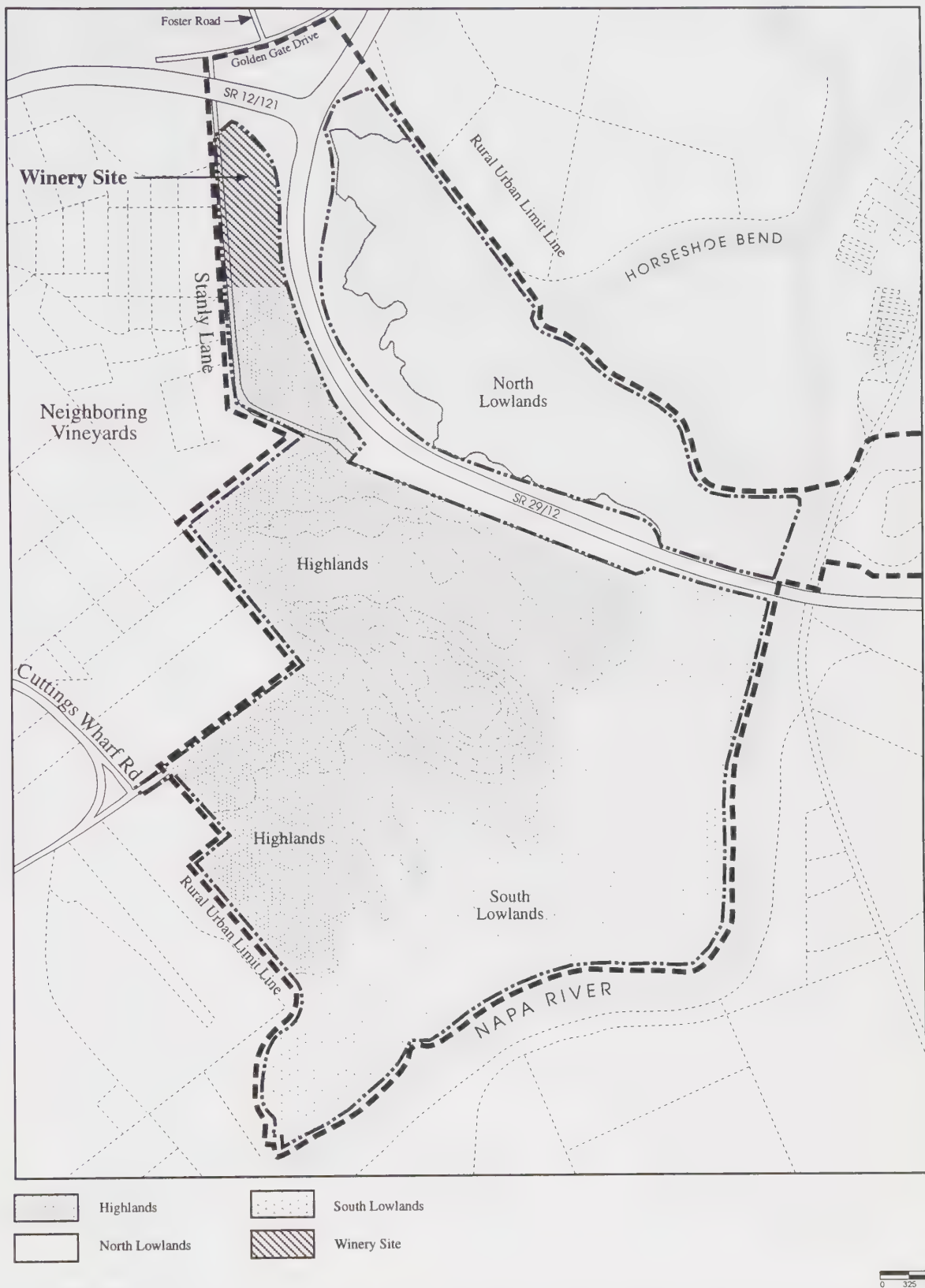
n. Public Health and Safety. There are no reduced public health and safety impacts for the All Resort Alternative. Relative to the proposed project, the All Resort Alternative would result in increased use, storage, and transport of pesticides, herbicides and fertilizer due to the development of a larger golf course (27 holes) than proposed in the original project (18 holes). The impacts and mitigation measures associated with construction activities identified for the proposed project would also apply to this alternative.

## **C. Agricultural Alternative**

### **1. Principal Characteristics**

This alternative would involve using Stanly Ranch solely for agricultural purposes. An agricultural site evaluation was performed by Richard Nagaoka, viticultural consultant, at the Stanly Ranch site in September 1997 to determine the feasibility of establishing additional vineyards on the site. This site evaluation is attached as Appendix K. Based on soils information, this analysis outlines the agricultural uses that would be appropriate for different areas of the Stanly Ranch site. The results of this study demonstrate the following:

- The upland areas of the site, including the existing vineyard and elevations of seven feet or more above mean sea level, are generally appropriate for wine grape varieties. The "Home Hill" and ranch portions of the site would be particularly appropriate for concentrated wine varieties such as Pinot Noir. These areas are shown as "Highlands" in Figure V-2.
- The North Lowlands, which fall below seven feet in elevation, are characterized by high salt levels and would not be suitable for wine grape cultivation. Portions of these areas (less than 3.0 EC [see Appendix K])



Source: EDAW, 1997 and Brady/LSA, 1997.

# STANLEY RANCH

## SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT

Figure V-2  
Alternative C: Agricultural Alternative

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would be more suitable for moderately salt tolerant crops such as barley, cotton, sugar beets, wheat, safflower, soy beans, sorghum, and rice. These areas are shown as "Lowlands" in Figure V-2.

- The South Lowlands, which fall at elevations at and below sea level, are characterized by very high salt levels. These areas are suitable for only a few agricultural grasses, such as bermuda grass, wheat grass, tall fescue, and sudan grass but only at reduced yields, and are probably best suited for wetlands. These areas are shown as "South Lowlands" in Figure V-2.

The Agricultural Alternative would also include a winery (up to 80,000 square feet) with limited retail uses placed in the same location as proposed in the *Draft SRSP*, as shown in Figure V-2.

The agricultural study concluded that approximately 43.4 percent, or about 398 acres, of the Stanly Ranch site would be suitable for vineyard development. About half of the remainder of the site in the North Lowlands could be viable for moderately salt-tolerant crops, depending on the crop characteristics and the reclamation practices implemented, although wetland and flooding characteristics of much of this area may effectively limit a large part of this acreage to continued grazing. The remaining 260 acres in the South Lowlands is suitable for only a few grasses, and, particularly given wetland restrictions, would likely be left open or used for grazing. The US Army Corps of Engineers regulates "fill" in jurisdictional wetlands. Much of the North and South Lowlands have been delineated as jurisdictional wetlands. If the site has not been actively farmed (disked and planted) since 1985, new farming involving plowing and planting in wetlands is considered "fill" and is subject to an individual Corps permit, which is difficult to obtain (Hicks, 1998). Information to date indicates that, while the site has been grazed, it has not been actively farmed since 1985; thus wetland permit requirements would apply (Kambe, 1998).

Implementation of the Agricultural Alternative would be expected to result in eucalyptus tree removal prior to the installation of vineyards in order to expand the area to be used for vineyards and to avoid soil limitations created by eucalyptus, and to manage health/safety hazards to winery traffic.

The majority of activity on the site under the Agricultural Alternative would be associated with agricultural uses. However, as the winery may also include supporting retail uses, the applied trip generation rates are about double those used for the winery under the other alternatives.

The Agricultural Alternative would not meet the applicant's objectives of developing a destination resort and residential community. It would meet some, but not all, City objectives.

## **2. Reduced and Adverse Impacts**

a. Land Use. The Agricultural Alternative would eliminate potential impacts of the proposed project associated with conflicts with adjoining agricultural operations and potential complaints related to aircraft operations.

b. Public Policy. As with the No Project Alternative, conflict with public policies could occur related to the following: RUL policies which promote urban development within the RUL; and housing policies which promote maintenance of a sufficient supply of land designated for residential development to meet the quantified housing need; and policies promoting provision of planned trails.

A basic premise of the RUL line, adopted in 1975, is that urban development belongs in the City and that lands outside the RUL should be protected for agricultural uses. Stanly Ranch is a major undeveloped site within the City's RUL.

Second, State housing law requires that cities maintain adequate sites to meet housing needs for all income levels. Eliminating Stanly Ranch as a future housing site may necessitate other adjustments elsewhere in the City to assure that long-term housing needs can continue to be met and may increase demand elsewhere in the County or nearby counties.

Additionally, the Agricultural Alternative would not help to implement plans for future multi-use trails.

In comparison to the proposed project, the Agricultural Alternative would have more adverse impacts related to the above policies, but reduced impacts in relation to policies addressing circulation, air quality, urban/rural conflicts, and others such as provision of adequate wastewater treatment services. Many policies which deal with designing or reviewing development projects are not applicable to the Agricultural Alternative.

c. Transportation and Circulation. The winery and associated retail uses of the Agricultural Alternative would generate about 160 weekday and 390 weekend daily trips. Peak hour activity would be low. During the average weekday PM peak hour, about 32 trips about be generated by the winery use. On weekends, the peak hour traffic would be 80 two-way trips. In addition to the winery activities, there would be traffic generated by the agricultural uses on the site. However, the level of traffic generated by these activities would be very low. Table V-10 shows the AM, PM and weekend traffic generated by the winery and support retail activities for the Agricultural Alternative. Since the Agricultural Alternative would generate a small increase over the amounts of existing traffic at the site, no adverse transportation

**Table V-10**  
**PEAK HOUR TRIP GENERATION COMPUTATIONS**  
**(AGRICULTURAL ALTERNATIVE)**

Land Use	Period of Activity	Number of Units	Adjustment Factor <sup>a</sup>	Adjusted Units	Trip Generation Rates		In/Out Split		Trips		
					Daily	AM Peak Hour	In	Out	Daily	Peak Hour	
										In	Out
Winery plus retail	AM Peak Hour	1	2	2	80	Closed	0	0	160	0	0
Winery plus retail	PM Peak Hour	1	2	2	80	16	0.31	0.69	160	10	22
Winery plus retail	Weekend Peak Hour	1	2	2	195	40	0.5	0.5	390	40	40

<sup>a</sup> To compensate for the support retail that may be provided as part of the winery, the trip generation rates for the project were doubled.



impacts would occur as a result of this alternative as compared to the proposed project.

d. Geology, Soils and Seismicity. Relative to the proposed project, the project would reduce the number of structures and people that would be exposed to expected seismic shaking at the project site. The winery site is not located within the recommended setback area for lineaments along the West Napa Fault (Joyce Associates, 1993). Therefore, the potential of fault rupture impacts would be low and similar to the proposed project. The construction and operation of a winery in a seismically-active area could result in damage during expected moderate to strong seismic shaking. Although damage related to seismic shaking could occur under this alternative, fewer people and structures could be affected than under the proposed project. Therefore, no adverse impacts more significant than the proposed project would occur under the Agricultural Alternative.

e. Hydrology, Drainage and Water Quality. Implementation of the Agricultural Alternative would not be expected to increase the volume or velocity of storm water runoff from the project site (relative to existing conditions) since the amount of impervious surfaces would not be significantly increased. The amount of urban pollutants contained in storm water runoff from the site that would be associated with increased vehicular activity would be expected to remain unchanged from existing conditions. Runoff would be significantly less than the proposed project because the amount of impervious surfaces would be less. Therefore, impacts related to increased runoff and discharge of urban runoff pollutants identified for the proposed project would be reduced with the Agricultural Alternative.

In terms of potential impacts to the floodplain from new fill, floodplain fill would be limited to winery development and would be significant, but not as significant as the proposed project. Implementation of the Agricultural Alternative would likely increase the amount of agricultural-related pollutants in storm water runoff from the site, relative to the proposed project. These pollutants include pesticides, herbicides, nitrates, phosphates, and sediment. Discharge of degraded storm water runoff or irrigation water into the Napa River could decrease water quality in the river system and the Bay.

Continued agricultural uses in the Lowlands of the site would require ongoing maintenance of the levees which keep the Lowlands from being inundated by tidal activity in the Napa River. Maintaining grazing in, or introduction of forage crops to the site Lowlands would represent an adverse factor relative to the proposed project. Agricultural activities conducted on lands adjacent to the Napa River are likely to contribute pollutants to the waterway and the Bay, particularly when the levees are breached or overtopped during moderate to large storms. Under the proposed project, agricultural activities in most of the site's Lowlands would be discontinued,

allowing the area's vegetation to revert to a more natural state. No levee trail impacts would result.

f. Biological Resources. This alternative would retain open corridors for wildlife movement although active agriculture may seasonally interrupt cover. Reduced human activity would reduce impacts to wildlife in comparison to the proposed project. However, adverse impacts of this alternative involve fill of wetlands for planting vineyards in the upland areas of the site and crops in portions of the Lowland areas of the site in or adjacent to wetlands. Planting most Lowland portions is highly unlikely due to the difficulty in acquiring necessary wetland fill permits. However, erosion and runoff from active agriculture next to wetlands could adversely affect wetland habitat and reduce upland cover for the salt marsh harvest mouse. With removal of eucalyptus trees, raptor perching and nesting habitat would be affected to a greater extent than the proposed project, as trees would not be replanted. Oat grass habitat would also be lost to vineyards and would not be replanted.

g. Historic and Cultural Resources. The rural setting of Stanly Lane, Old Suscol Road, and the Stanly House and some related buildings are assumed to be preserved. The historic stone bridges on Stanly Lane are assumed to be retained under this alternative, as proposed for the proposed project. The Stanly House may be reused in its original location if economically feasible given its condition. It is assumed that the cistern would not be altered, as it would for the proposed project by the construction of the adjacent spa. Vineyard plantings in upland areas could affect subsurface prehistoric or historic deposits similar to the proposed project. As eucalyptus windrows are assumed to be removed, this impact would be more adverse than the proposed project in that none of the eucalyptus would be retained in the near term and windrows would not be replanted.

h. Visual Quality. The visual character of the site would remain consistent with surrounding rural agricultural uses. The Agricultural Alternative would result in the removal of existing on-site trees which would result in an adverse visual impact because these trees are a highly visible element that help to define the site's character. Additionally, winery design could have significant impacts requiring design mitigation measures similar to the proposed project.

i. Population, Employment and Housing. Many fewer jobs would be created with the Agricultural Alternative as compared to the proposed project and no new homes would be constructed.

j. Public Services. There would be a need for minor additional police and fire services at the proposed winery, which may be offset by added tax revenue, although this has not been definitively evaluated. However, the winery would be located outside target response times. The Agricultural Alternative would not be likely to further City plans to provide public trails on the site, or generate substantial tax revenue for the City's General Fund to assist in improving services elsewhere in the City. New demands for recreational facilities would not be significant.

k. Public Utilities. Under the Agricultural Alternative, water supply is assumed to be City water for the existing farm-related residential use and winery use. It is likely that either City water or an onsite water impound system would be used for vineyard irrigation. On-site wells in the Stanly Ranch vicinity are very unlikely to produce sufficient quantity for vineyards (Aspegren, 1998). If a water impound system were developed, the estimated potable water demand from City water due to the residential and winery uses would be about 0.05 mgd. If City water were used for vineyard irrigation, the estimated potable water demand would increase to 0.59 mgd (Table V-8). In either case, the Agricultural Alternative would exceed historic use (0.019 mgd) and exacerbate the existing water deficit during drought conditions until City water supplies are increased. This would be a significant adverse impact compared to the proposed project. A third possibility is that reclaimed water from NSD could be pursued in conjunction with other area wineries.

Septage generated from the winery would be discharged to a new septic tank-leach field system in lieu of disposal to the NSD. Therefore, the Agricultural Alternative would not have the potential to exacerbate existing overloaded conditions experienced at the NSD treatment plant, as would occur with the proposed project.

The proposed septic tank-leach field system for the winery under the Agricultural Alternative would need to be constructed and operated pursuant to the regulatory requirements of the Napa County Environmental Management, City of Napa Department of Public Works, and the NSD.

l. Noise. On-site uses would not be affected by existing traffic noise as for the proposed project. Noise generated by the winery and new vineyard uses should create no significant adverse impacts on adjacent uses unusual to the area.

m. Air Quality. This alternative would avoid the construction-related and most of the permanent local and regional air quality impacts associated with the proposed project. This alternative would result in new required emissions of 4 pounds per day of ROG, 7 pounds per day of NO<sub>x</sub> and 2 pounds per day of PM<sub>10</sub>. These amounts are well below the BAAQMD threshold of significance of 80 pounds per day. Expansion of agricultural activities on the site would create sporadic emissions of dust from tilling and unpaved road travel, possible emissions of hydrocarbons



associated with pesticide use, and possible emissions associated with agricultural burning. However, overall emissions would be far less than for the proposed project.

n. Public Health and Safety. The Agricultural Alternative would result in increased use, storage, and transport of pesticides, herbicides, and fertilizers, relative to the proposed project. Due to the construction of the winery, and if existing farm structures were to be demolished and/or rehabilitated, impacts to public health and safety related to construction would be similar to those described for the proposed project.

#### **D. The On-Site Wastewater System Alternative**

##### **1. Principal Characteristics**

This alternative would be the same as the proposed project except that an on-site wastewater treatment and reclamation facility would be constructed onsite.

The on-site wastewater system would avoid the need for the project to connect to facilities owned and operated by the Napa Sanitation District (NSD). It would only be implemented in the event that capacity is unavailable to serve the project from NSD.

The on-site wastewater facility would consist of a gravity collection system, a treatment facility, and a series of ponds throughout the project to provide both long- and short-term storage for reclaimed wastewater. The location of the ponds and treatment facility are shown in Figure V-3. The reclaimed wastewater would be used for irrigation of the private neighborhood parks and major open space landscaping in residential areas, resort open space areas, the golf course, wine center and winery landscaping, major street landscaping, vineyards and landscape buffers, and storm drain treatment ponds (Ruggeri-Jensen-Azar & Associates, 1998). The estimated annual average water demand that would be required to irrigate these areas is about 145 million gallons per year (0.4 mgd).

Reclaimed water would be stored in storage ponds, storm drain treatment ponds (created wetlands), and long-term storage (golf) ponds. The short-term storage pond would be constructed for emergency purposes and would hold up to 24 hours of sewage flow, which would equal approximately 300,000 gallons. The long-term storage ponds would have a total design capacity of approximately 51 million gallons. The ponds would be designed to contain reclaimed water and direct rainfall during winter months when reclaimed water is not stored in the ponds for irrigation.

If on-site water saving devices were implemented, the total amount of reclaimed water available for irrigation would range from about 86 million gallons per year



Source: Ruggeri Jensen Azar & Associates 1998

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Figure V-3  
 Alternative D: On-Site Wastewater System

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during an average season and 91 million gallons per year during a wet season (Table V-11). If on-site water saving devices were not used at the project site, the total amount of reclaimed water available for irrigation would increase to about 89 million gallons per year during an average season and 94 million gallons per year during a wet season. Based on the existing data, the reclaimed water generated on-site would be insufficient to meet the irrigation demand of 145 million gallons (0.4 mgd) for the project. Therefore, additional sources of reclaimed water would need to be secured to adequately meet the estimated irrigation needs of the project, or the areas requiring irrigation would need to be reduced. This alternative would result in an estimated 55 tons per year of sludge that would require off-site disposal.

As discussed in Section IV.K, Utilities, Impact UTIL-3, the State Department of Health and Human Services (DHS), Office of Drinking Water and the RWQCB have established regulatory requirements for the treatment and application of reclaimed wastewater. A Waste Discharge Requirement (WDR) for the proposed alternative would need to be obtained from the RWQCB for the operation of a wastewater treatment and reclamation facility.

The Implementation Program of the *Draft SRSP* indicates that the operation and maintenance of the on-site treatment facility must be under the authority of a public entity, such as the Napa Sanitation District (NSD), a community services district, or the City. The applicant or the City would need to submit a formal application to LAFCO requesting that a community services district be established for the project.

This alternative would meet the applicant's objectives for the project and most City objectives described in Chapter III.

## **2. Reduced and Adverse Impacts**

a. Land Use. This alternative would have similar land use impacts to the proposed project, without any specific reduced impacts related to land use. This alternative could result in increased secondary land use conflicts as compared to the proposed project due to the potential for increased complaints from odors associated with operation of an on-site wastewater system, and potential public safety hazards associated with on-site treated wastewater storage ponds. These two issues are discussed below under "Air Quality" and "Public Health and Safety".

b. Public Policy. Public policy conflicts of this alternative would be similar to the proposed project, except as related to the adequacy of urban services. By establishing an on-site wastewater system, the project would not have to rely on services from the Napa Sanitation District (NSD) resulting in no impacts to NSD capacity, which is overloaded until improvements currently underway are completed. While the on-site wastewater and reclamation system could be run by the NSD, it could also be under the auspices of the City or a community services district. Without the required extension of a wastewater trunk line across the Napa River, potential trunk line impacts related to protection of habitat and policy concerns regarding growth-inducement would also be avoided.

**Table V-11**  
**ESTIMATED RECLAIMED WATER IRRIGATION**  
**DEMAND, SUPPLY, AND DEFICIT**  
**(million gallons per year)**

	With Use of On-Site Water Saving Devices		Without Use of On-Site Water Saving Devices	
	Average Season	Wet Season	Average Season	Wet Season
Estimated Reclaimed Water Irrigation Demand	145	145	145	145
Estimated Reclaimed Water Irrigation Supply from On-Site Wastewater Treatment System	86	91	89	94
Estimated Reclaimed Water Irrigation Deficit	59	54	56	51

Note: For conservative purposes, the estimated reclaimed water irrigation demand during the wet season is assumed to be equivalent to that for the average season.

Source: Baseline Environmental Consulting and Ruggeri-Jensen-Azar & Associates, 1998.

- c. Transportation and Circulation. A minor number of increased truck trips would occur in association with sludge disposal. Otherwise, transportation and circulation impacts would be similar to the proposed project.
- d. Geology, Soils and Seismicity. This alternative does not have any reduced impacts related to geology, soils, and seismicity compared to the proposed project. Buildings/structures associated with the on-site wastewater system could be subject to damage from seismic events, similar to those identified for the proposed project. However, this alternative would include more facilities for the overall site due to the proposal for the wastewater system, and the wastewater plant site is underlain by bay mud which generally has a high potential for liquefaction. In addition, the proposed wastewater treatment plant should be sited outside the recommended setback zone identified in the fault hazard evaluation prepared for the proposed project (Joyce Associates, 1993). Mitigation Measures GEO-1, GEO-2 and GEO-3 apply to this alternative. No further mitigation is required.
- e. Hydrology, Drainage and Water Quality. The alternative does not have any reduced impacts related to hydrology, drainage and water quality compared to the proposed project. Impacts related to water quality and levee safety would be similar to the proposed project.

The on-site wastewater treatment plant, which is located in the North Lowlands, would require an increased amount of fill to be placed in the floodplain, relative to

the proposed project. The On-Site Wastewater Treatment Alternative should not include net fill in the 100-year floodplain. Any placement of fill in the floodplain required to accommodate the project design should be balanced by removal of an equal or greater amount of material from elsewhere in the floodplain.

f. Biological Resources. One of the major biological impacts from the proposed project and the Onsite Wastewater Treatment Alternative is to wetlands resources, where various aspects of the proposed project would result in limited fill of wetlands. If the added sedimentation basin needed for this alternative were treated as a wetland enhancement area with 50- to 100-foot buffers planted with native trees and shrubs, the net result would be a beneficial impact, when compared with the proposed project. In addition, retaining water in ponds in the dry season would provide valuable habitat if buffers were planted with native vegetation between the ponds and developed areas. Impacts on wildlife movement, trees, fish species, and other biological resources would be the same as the proposed project.

g. Historic and Cultural Resources. Impacts on Historic and Cultural Resources would be the same as for the proposed project.

h. Visual Quality. There would be no reduced visual impacts for this alternative as compared to the proposed project. The on-site wastewater treatment facility located just east of the Highway 29 overcrossing, could be visible from public locations. Depending on plant design and landscaping, this could be a significant visual effect. The treatment plant would need to adhere to the same design guidelines, including landscaping, as the buildings in the proposed project and also be visually compatible with the other buildings in the proposed project.

i. Population, Employment and Housing. Population, employment and housing impacts would be essentially the same as for the proposed project.

j. Public Services. Public service impacts of this alternative would be similar to the proposed project except as related to solid waste disposal services. Off-site land disposal of the generated sludge from the proposed on-site treatment facility could reduce municipal landfill space if alternative disposal/reuse options were not aggressively pursued. Sludge would be generated at an estimated rate of 300 pounds per day, or 55 tons per year. This sludge would go to an authorized landfill or possibly be disposed on agricultural land. Such land disposal is the preferred method, especially given the absence of heavy metals in the sludge material. Application to agricultural land is a routine practice in the Napa/Sonoma/Solano County area. A Wastewater Sludge Disposal Plan would need to be prepared by the public entity responsible for the wastewater treatment facility and submitted to the County and other appropriate agencies for review and approval.



k. Public Utilities. Implementation of this alternative would avoid the proposed project's significant wastewater impact associated with discharging wastewater to the Napa Sanitation District facilities if additional treatment capacity is not completed.

Potable water supply impacts for the Wastewater Treatment Alternative are the same as for the proposed project. The projected water demand for this alternative is estimated by the project applicant to be approximately 0.7 mgd; 0.3 mgd would be from potable water supplied by the City while 0.4 mgd (i.e., 145 million gallons per year) would be satisfied by use of reclaimed water generated from the on-site wastewater treatment plant and other sources. NSD is a likely supplement. The proposed project would receive reclaimed water entirely from NSD. Therefore, this alternative would decrease demand for NSD reclaimed water supplies at least by 86 million gallons per year (0.24 mgd).

As indicated in the project description for this alternative, the reclaimed water generated from on-site wastewater treatment system would be insufficient to meet the irrigation demand for the project. If on-site water saving devices were not used at the project site, then an additional 56 million gallons per year during an average season and 51 million gallons per year during a wet season would be needed to adequately meet the project irrigation demands (Table V-11). If on-site water saving devices were used at the project site, then an additional 59 million gallons per year during an average season and 54 million gallons per year during a wet season would be needed. The operation and maintenance of the on-site treatment facility must be under the authority of a public entity, such as NSD, the City, or a community services district. The public entity could be formed specifically for the project and would be responsible for complying with the WDR. The Master Developer or the City would need to submit a formal application to LAFCO, that a community services district be established for the project. LAFCO would then review and could approve the results, if the district were funded adequately and were organized and delineated appropriately for the project. One of the following options would be required to make up for the reclaimed water deficit:

- Reduce the reclaimed water demand to a level equal to, or less than, the estimated reclaimed water supply capacity of the on-site wastewater treatment system; this could be accomplished by decreasing or eliminating proposed reclaimed water irrigation areas.
- Obtain additional reclaimed water from NSD, in which case a reclaimed water distribution main would need to be constructed.

l. Noise. Noise impacts would be essentially the same as for the proposed project.

m. Air Quality. No reduced air quality impacts would occur with this alternative. This alternative would create a possible odor-related land use conflict by placing a wastewater treatment plant -within 1,000 feet of the nearest homes and 200 feet of a segment of a proposed public trail. Under typical daytime conditions, any odors would be carried away from residences, but the potential would exist for odor complaints under atypical weather conditions or if operational problems occur at the wastewater plant that increase the generation of objectionable odors.

n. Public Health and Safety. There would be no reduced impacts associated with public health and safety with the On-site Wastewater Treatment Alternative. The on-site wastewater system could potentially affect public health and safety if the dedicated storage ponds were not adequately secured and protected from public trespassing. Each of the two dedicated storage ponds, providing approximately 50 acre-feet of storage and with levees of about 11 feet above grade, would be empty for five months of the year (Questa Engineering, 1997). This could be a potential public hazard. To mitigate this potential impact the ponds shall be planned and built with adequate setbacks from public areas and with containment (i.e. fences) or other means of security.

An uncontrolled release of hazardous materials could occur during wastewater treatment operations, which could adversely impact site workers and the environment. More significant impacts related to hazardous materials would occur under this alternative compared to the proposed project due to the on-site wastewater plant. Hazardous substances that could be used in conjunction with this process include sodium and calcium hypochlorites, ozone gas, petroleum products, and solvents for cleaning mechanical equipment. These materials must be managed in accordance with all Federal, State, and local regulations regarding hazardous materials use, storage, and handling. The mitigation measure in the Public Health and Safety subsection of Chapter IV which addresses hazardous materials management would apply to this alternative.

The wastewater treatment plant would generate sludge (approximately 55 tons per year). The sludge will be hauled across the site by a 2,000 to 3,000-gallon tanker truck on an average monthly basis (Questa Engineering, 1997). If transport of the sludge is near residential and resort areas, then there is an increase of exposure to the public in the event of a spill or other emergency, and a possible public nuisance due to potential sludge odors. Transport operations shall include provisions for emergency response procedures in case of a spill or accident, and for appropriate containment of the sludge in accordance with U.S. DOT regulations (Title 49 Code of Federal Regulations). The mitigation measures described for the project and

existing laws and regulations for management of hazardous materials used, stored or generated at an on-site wastewater treatment plant would appropriately reduce these impacts to a less-than-significant level.

## **E. Reduced Density Alternative**

### **1. Principal Characteristics**

This alternative would reduce the market rate (non-resort) housing units by 30 percent. Thus, a total of 378 market rate housing units would be created under this alternative, as compared to 540 for the proposed project. The primary changes to the proposed project would include the following (see Figure V-4).

- Elimination of Neighborhood 1 to reduce visual impacts of the project as seen from SR 12/29, for a total unit reduction of 109 single-family units. This area would be used to relocate two golf holes originally proposed north and east of Stanly Lane near the bend in the road.
- Reduction of 36 Vineyard Homes and 6 Townhomes from Neighborhood 2 Home Hill to also reduce visual impacts from SR 12/29. This 100-foot (+) ridgeline area would be planted with evergreen trees to screen housing to the southwest from view.
- Reduction of 10 units in the southwest portion of Neighborhood 4 in the area nearest the salt marsh harvest mouse habitat. This reduction would also allow roads and lots to be set farther back from the agricultural edge/flood plain and wetland edge and possibly avoid a gas line easement within Neighborhood 4.
- A revised planting plan for the project site to include removal of all on-site eucalyptus (except along the levee) and replanting Stanly Lane with Valley Oaks, in accordance with arborist's recommendation of June 1998 study.
- Additional evergreen and native tree planting on the site and within the Highway 29 Caltrans right-of-way from south of the winery (as shown) to the SR 12/29 overcrossing, within an area about 200 feet in width.
- Relocation of golf holes 3 and 4 to the original Neighborhood 1 area and reuse of the original golf hole acreage for expansion of vineyards, tree planting; and relocation of golf holes 6 and 8 to the southwest to protect the Stanly House.

All other features of the project would remain unchanged. This alternative would meet some of the applicant's objectives but may not be financially feasible, and would meet most of the City's objectives.





## 2. Reduced and Adverse Impacts

a. Land Use. This alternative would have similar impacts to the proposed project related to potential conflicts with nearby agricultural and airport operations, but potential airport complaint impacts would be slightly reduced due to the reduction in numbers of units.

b. Public Policy. Potential *General Plan* policy conflicts would be slightly reduced with this alternative due to the reduction in density. The Reduced Density Alternative would be more compatible with policies related to the following: protection of scenic corridors; protection of biotic habitats; protection of hillsides; and protection of historic properties.

c. Transportation and Circulation. In order to determine the general traffic impact magnitude of this alternative, an approach similar to that used for the proposed project was used. The only difference is the reduction in numbers of residential units.

Tables V-12 through V-14 show the AM, PM and weekend trip generation for the Reduced Density Alternative. These tables also provide the traffic generation for the proposed project. Tables V-15 through V-17 show the AM, PM and weekend peak hour levels of service produced by the project.

The tables indicate that for each of the three peak periods the traffic generated by the Reduced Density Alternative is less on both a daily and peak hour basis than the proposed project. The intersection impacts are also lower than those identified for the proposed project. However, even with the reduction in density, all the significant transportation-related impacts would remain significant. Implementation of all project mitigation measures would result in potentially significant impacts.

d. Geology, Soils and Seismicity. Relative to the proposed project, the Reduced Density Alternative would not specifically reduce or eliminate significant geologic or seismic impacts.

Although fewer housing units would be constructed, the proposed structures and infrastructure elements would be subject to strong seismic shaking during expected regional earthquakes. Structures would not be constructed within recommended setback zones for lineaments along the possible location of the West Napa Fault. Although no structures are proposed within areas underlain by bay mud, utilities, a parking lot and Interpretive Center would need to be constructed in this area and the impact of liquefaction and settlement would be similar to that described for the proposed project. The impact of the corrosiveness of the soils at the project site would not change.

**Table V-12**  
**WEEKDAY AM PEAK HOUR TRIP GENERATION COMPUTATIONS**  
**(REDUCED DENSITY ALTERNATIVE)**

Land Use	Unit Type	Number of Units	Adjustment Factor <sup>a</sup>	Adjusted Units	Trip Generation Rates		In/Out Split		Trips		
					Daily	AM Peak Hour	In	Out	Daily	AM Peak Hour	
										In	Out
Resort Facilities and Incl:											
Guest Cottages	Dwelling Units	200									
Carefree Club		25									
Resort Homes		75									
Total Units		300	0.85	255	10.16	0.33	0.6	0.4	2591	50	34
Resort Restaurants	Seats	390	0.5	195	2.86	0.03	0.94	0.06	558	6	0
Single Family - Residential	Dwelling Units	378		378	9.55	0.74	0.26	0.74	3610	73	207
Apartments - Employee	Dwelling Units	54		54	4.03	0.74	0.26	0.74	218	10	30
Golf Course/Club House and Auxiliary Support Facilities	Holes	0.5	9	37.59	3.22	0.83	0.17	338	24	5	
Wine Center	KSF <sup>b</sup>	40	0.8	32	40.57	Closed	0.00	0.00	1,300	0	0
Winery	Winery	1		1	80	Closed	0.00	0.00	80	0	0
Total for Reduced Density Alternative									8696	163	276
Comparative Total for Proposed Project									10243	194	365

<sup>a</sup> Adjustment factors are taken from the Korve Engineering Trip Generation analysis and are as follows: 85 percent applied to the resort on the assumption that a maximum of 85 percent of the rooms would be occupied at any one time; 50 percent applied to the restaurant and golf course on assumption that 50 percent of trips would be internal to the project and not distributed onto the public roadway system; 80 percent applied to the wine center on the assumption that 20 percent of the trips would be internal and not distributed onto the public roadway system.

<sup>b</sup> KSF = thousand square feet.



**Table V-13**  
**WEEKDAY PM PEAK HOUR TRIP GENERATION COMPUTATIONS**  
**(REDUCED DENSITY ALTERNATIVE)**

Land Use	Unit Type	Number of Units	Adjustment Factor <sup>a</sup>	Adjusted Units	Trip Generation Rates		In/Out Split		Trips		
					Daily	PM Peak Hour	In	Out	Daily	PM Peak Hour	
										In	Out
Resort Facilities and Incl: Guest Cottages Carefree Club Resort Homes Total Units	Dwelling Units	200 25 75 300	0.85	255	10.16	0.48	0.37	0.63	2591	45	77
Resort Restaurants	Seats	390	0.5	195	2.86	0.23	0.7	0.3	558	31	14
Single Family - Residential	Dwelling Units	378		378	9.55	1.01	0.65	0.35	3610	248	134
Apartments - Employee	Dwelling Units	54		54	4.03	1.01	0.65	0.35	218	35	19
Golf Course/Club House and Auxiliary Support Facilities	Holes	0.5	9	37.59	3.22	3.38	0.52	0.48	338	16	15
Wine Center	KSF <sup>b</sup>	40	0.8	32	40.57	4.93	0.57	0.43	1301	90	68
Winery	Winery	1		1	80	16	0.31	0.69	80	5	11
Total for Reduced Density Alternative									8696	470	338
Comparative Total for Proposed Project									10243	577	395

<sup>a</sup> Adjustment factors are taken from the Korve Engineering Trip Generation analysis and are as follows: 85 percent applied to the resort on the assumption that a maximum of 85 percent of the rooms would be occupied at any one time; 50 percent applied to the restaurant and golf course on assumption that 50 percent of trips would be internal to the project and not distributed onto the public roadway system; 80 percent applied to the wine center on the assumption that 20 percent of the trips would be internal and not distributed onto the public roadway system.

<sup>b</sup> KSF = thousand square feet.

**Table V-14**  
**WEEKEND PEAK HOUR TRIP GENERATION COMPUTATIONS**  
**(REDUCED DENSITY ALTERNATIVE)**

Land Use	Unit Type	Number of Units	Adjustment Factor <sup>a</sup>	Adjusted Units	Trip Generation Rates		In/Out Split		Trips		
					Daily	Weekend Peak Hour	In	Out	Daily	Weekend Peak Hour	
										In	Out
Resort Facilities and Incl:											
Guest Cottages	Dwelling Units	200									
Carefree Club		25									
Resort Homes		<u>75</u>									
Total Units		300	0.85	255	11.25	0.82	0.47	0.53	2869	98	111
Resort Restaurants	Seats	390	0.5	195	2.74	0.32	0.53	0.47	534	33	29
Single Family - Residential	Dwelling Units	378		378	10.19	0.96	0.54	0.46	3852	196	167
Apartments - Employee	Dwelling Units	54		54	3.39	0.96	0.54	0.46	183	28	24
Golf Course/Club House and Auxiliary Support Facilities	Holes	0.5	9	37.59	42.43	4.6	0.72	0.28	382	30	12
Wine Center	KSF <sup>b</sup>	40	0.8	32	45.91	10.13	0.5	0.5	1469	162	162
Winery	Winery	1		1	195	39	0.5	0.5	195	20	20
Total for Reduced Density Alternative									9484	567	525
Comparative Total for Proposed Project									11135	651	596

<sup>a</sup> Adjustment factors are taken from the Korve Engineering Trip Generation analysis and are as follows: 85 percent applied to the resort on the assumption that a maximum of 85 percent of the rooms would be occupied at any one time; 50 percent applied to the restaurant and golf course on assumption that 50 percent of trips would be internal to the project and not distributed onto the public roadway system; 80 percent applied to the wine center on the assumption that 20 percent of the trips would be internal and not distributed onto the public roadway system.

<sup>b</sup> KSF = thousand square feet.

**Table V-15**  
**COMPARISON OF SERVICE LEVELS FOR THE AM PEAK HOUR**  
**(REDUCED DENSITY ALTERNATIVE)**

Intersection	Existing Conditions			Existing-Plus-Project			Cumulative Conditions			Cumulative-Plus-Project		
	LOS <sup>a</sup>	D/V <sup>b</sup>	V/C <sup>c</sup>	LOS	D/V	V/C	LOS	D/V	V/C	LOS	D/V	V/C
Old Sonoma Road & SR 12/121	C	1.3	NC <sup>d</sup>	C	1.3	NC	E	4.3	NC	E	4.7	NC
Cuttings Wharf Road & SR 12/121	C	0.9	NC	C	0.9	NC	D	1.5	NC	E	1.6	NC
Stanly Lane & SR 12/121	F	0.5	NC	<i>B<sup>e</sup></i>	<i>10.7</i>	<i>0.558</i>	F	1.4	NC	<i>B<sup>e</sup></i>	<i>10.9</i>	<i>0.698</i>
SR 12/121/29	C	15.4	0.721	C	16.7	0.784	D	25.3	0.974	D	35	1.037
SR 221 & SR 29	E	40.9	0.800	E	41.7	0.819	F	72.9	0.980	F	80	0.998
Imola Avenue & Coombs Street	C	21.5	0.560	C	21.2	0.572	C	21.8	0.683	C	21.7	0.698
Imola Avenue & Jefferson Street	C	19.4	0.475	C	19.6	0.488	C	21.3	0.633	C	21.7	0.646
Imola Avenue & SR 29 Northbound Ramps	F	4.0	NC	<b>F</b>	<b>4.6</b>	<b>NC</b>	<b>F</b>	<b>33.8</b>	<b>NC</b>	<b>F</b>	<b>40.6</b>	<b>NC</b>
Imola Avenue & SR 29 Southbound Ramps	F	85.9	1.336	F	79.9	1.316	F	272.6	1.644	F	248.8	1.619
Foster Road & Golden Gate Drive	A	2.0	NC	A	1.8	NC	A	1.8	NC	A	1.7	NC
Imola Avenue & Golden Gate/South Freeway Drives	C	3.6	NC	C	3.7	NC	E	6.4	NC	E	6.7	NC
Imola Avenue & Foster Road	B	5.6	0.565	B	5.8	0.587	F	265.2	1.651	F	254.2	1.638
Foster Road & Old Sonoma Road	A	1.5	NC	A	1.5	NC	B	1.7	NC	B	1.8	NC

<sup>a</sup> LOS = Level of Service

<sup>b</sup> D/V = Average Delay per Vehicle in Seconds

<sup>c</sup> V/C = Volume/Capacity Ratio

<sup>d</sup> NC = V/C Ratio Not Computed for 2-Way Stop Sign

<sup>e</sup> LOS with Project-Proposed Signal

Note: **Boldface Text** indicates significant adverse impact.

*Italic Text* indicates beneficial impact.

Source: Dowling Associates, 1998.



**Table V-16**  
**COMPARISON OF SERVICE LEVELS FOR THE PM PEAK HOUR**  
**(REDUCED DENSITY ALTERNATIVE)**

Intersection	Existing Conditions			Existing-Plus-Project			Cumulative Conditions			Cumulative-Plus-Project		
	LOS <sup>a</sup>	D/V <sup>b</sup>	V/C <sup>c</sup>	LOS	D/V	V/C	LOS	D/V	V/C	LOS	D/V	V/C
Old Sonoma Road & SR 12/121	D	2.6	NC <sup>d</sup>	E	2.9	NC	F	899.2	NC	F	>1000	NC
Cuttings Wharf Road & SR 12/121	C	1.3	NC	D	1.3	NC	F	2.7	NC	F	3.1	NC
Stanly Lane & SR 12/121	F	1.00	NC	<i>B<sup>e</sup></i>	<i>14.7</i>	<i>0.671</i>	F	8.7	NC	<i>C<sup>e</sup></i>	<i>15.2</i>	<i>0.813</i>
SR 12/121/ 29	C	15.2	0.874	C	21.3	0.818	<b>E</b>	<b>54.0</b>	<b>1.145</b>	<b>F</b>	<b>122.3</b>	<b>1.099</b>
SR 221 & SR 29	F	72.3	1.002	F	82.2	1.033	F	579.6	1.466	F	637	1.497
Imola Avenue & Coombs Street	E	47.0	1.015	E	55.1	1.055	F	148.0	1.296	F	171.9	1.338
Imola Avenue & Jefferson Street	C	22.0	0.642	C	23.1	0.715	D	26.9	0.849	D	31.1	0.919
Imola Avenue & SR 29 Northbound Ramps	F	69.4	NC	<b>F</b>	<b>109.6</b>	<b>NC</b>	<b>F</b>	<b>285.4</b>	<b>NC</b>	<b>F</b>	<b>498.5</b>	<b>NC</b>
Imola Avenue & SR 29 Southbound Ramps	F	58.6	1.443	F	47.5	1.403	F	127.3	1.774	F	98.8	1.725
Foster Road & Golden Gate Drive	A	1.6	NC	A	1.6	NC	A	1.4	NC	A	1.5	NC
Imola Avenue & Golden Gate/South Freeway Drives	C	2.9	NC	C	3	NC	D	6.8	NC	D	7.1	NC
Imola Avenue & Foster Road	A	2.6	0.295	A	2.6	0.307	C	13.0	0.823	C	11.2	0.748
Foster Road & Old Sonoma Road	B	1.9	NC	B	1.9	NC	B	2.6	NC	B	2.7	NC

<sup>a</sup> LOS = Level of Service<sup>b</sup> D/V = Average Delay per Vehicle in Seconds<sup>c</sup> V/C = Volume/Capacity Ratio<sup>d</sup> NC = V/C Ratio Not Computed for 2-Way Stop Sign<sup>e</sup> LOS with Project-Proposed SignalNote: **Boldface Text** indicates significant adverse impact.*Italic Text* indicates beneficial impact.

Source: Dowling Associates, 1998.

**Table V-17**  
**COMPARISON OF SERVICE LEVELS FOR THE WEEKEND PEAK HOUR**  
**(REDUCED DENSITY ALTERNATIVE)**

Intersection	Existing Conditions			Existing-Plus-Project			Cumulative Conditions			Cumulative-Plus-Project		
	LOS <sup>a</sup>	D/V <sup>b</sup>	V/C <sup>c</sup>	LOS	D/V	V/C	LOS	D/V	V/C	LOS	D/V	V/C
Old Sonoma Road & SR 12/121	F	3.3	NC <sup>d</sup>	F	5.5	NC	F	>1000	NC	F	>1000	NC
Cuttings Wharf Road & SR 12/121	D	1.8	NC	E	2.5	NC	<b>F</b>	<b>4.9</b>	<b>NC</b>	<b>F</b>	<b>8.9</b>	<b>NC</b>
Stanly Lane & SR 12/121	F	2.4	NC	<i>C</i>	20.2	0.866	F	31.8	NC	<i>C</i>	23.8	0.926
SR 12/121/29	C	17.4	0.764	C	20.8	0.891	D	27.2	0.984	E	54.1	1.112
SR 221 & SR 29	E	42.2	0.819	E	45.1	0.857	F	181.5	1.141	F	217.9	1.178
Imola Avenue & Coombs Street	D	26.1	0.675	D	25.9	0.707	D	29.3	0.819	D	30.1	0.851
Imola Avenue & Jefferson Street	C	21.9	0.457	C	22.9	0.542	C	23.7	0.606	C	24.7	0.686
Imola Avenue & SR 29 Northbound Ramps	E	2.3	NC	E	2.9	NC	<b>F</b>	<b>3.6</b>	<b>NC</b>	<b>F</b>	<b>5.1</b>	<b>NC</b>
Imola Avenue & SR 29 Southbound Ramps	C	11.1	0.808	C	10.1	0.786	C	11.6	1.033	C	10.6	1.004
Foster Road & Golden Gate Drive	A	1.6	NC	A	1.6	NC	A	1.4	NC	A	1.4	NC
Imola Avenue & Golden Gate/South Freeway Drives	C	4.1	NC	C	4.3	NC	F	12.2	NC	F	13.5	NC
Imola Avenue & Foster Road	A	2.8	0.318	A	2.9	0.322	C	18.7	0.931	C	17.4	0.907
Foster Road & Old Sonoma Road	B	1.5	NC	B	1.6	NC	B	1.9	NC	B	2	NC

<sup>a</sup> LOS = Level of Service

<sup>b</sup> D/V = Average Delay per Vehicle in Seconds

<sup>c</sup> V/C = Volume/Capacity Ratio

<sup>d</sup> NC = V/C Ratio Not Computed for 2-Way Stop Sign

<sup>e</sup> LOS with Project-Proposed Signal

Note: **Boldface Text** indicates significant adverse impact.

*Italic Text* indicates beneficial impact.

Source: Dowling Associates, 1998.

e. Hydrology, Drainage and Water Quality. Under the Reduced Density Alternative, potential impacts associated with water quality degradation (e.g., urban pollutants in runoff) would be expected to be reduced relative to the proposed project. Fewer neighborhoods, and therefore less auto-based traffic, would occur at the site. Similarly, decreases in runoff volume would be incrementally decreased.

Minor increases in runoff volume associated with the proposed project were determined to be less than significant, and therefore would remain less than significant under the Reduced Density Alternative. Levee safety impacts would be the same as the proposed project.

f. Biological Resources. The Reduced Density Alternative is very similar to the proposed project. The amount of ground disturbance would be slightly reduced under this alternative. Eucalyptus trees would be removed as they would with the proposed project. Reduction of 10 units in Neighborhood 4 would slightly reduce impacts to the salt marsh harvest mouse but impacts would still remain significant without mitigation. Replacing eucalyptus with Valley Oak trees rather than a mix of native and non-native trees would also reduce loss of habitat impacts although they would continue to remain significant short-term because of the lag time for any tree to provide perching, nesting, and roosting habitat. Because of the greater buffer between residential units and salt marsh harvest mouse habitat, the biological impacts are slightly less than those of the proposed project.

g. Historic and Cultural Resources. The Reduced Density Alternative would increase impacts related to the replanting plan as compared to the proposed project in terms of the historic value of the eucalyptus windrows. The Reduced Density Alternative proposes a “revised replanting plan” which includes immediate removal of all Stanly Lane eucalyptus and replanting with valley oaks. (Replanting along Old Suscol Road would be the same as for the proposed project.)

The revised replanting plan would increase impacts on historic resources because of the following: 1) none of the existing eucalyptus would be retained in the short-term; and 2) Valley Oaks would not resemble the verticality and dense greenery of the historic eucalyptus as well as the project’s replanting plan that includes redwoods and poplars. However, it should be noted that the valley oaks would not create a “false” sense of historic development because these were not used as windrows during the 19th century.

This alternative would reduce the adverse impact on the Stanly House to a less-than-significant level due to the proposal to retain the Stanly House in its current and historic location. In comparison, the proposed project includes either moving the Stanly House or demolishing the building.



h. Visual Quality. Visual impacts of the project, as seen from SR 29/12 would be significantly improved due to the added landscape screening between the highway and the project site, and the proposed elimination of Neighborhood 1 and homes along the Home Hill ridgeline. While the overall Reduced Density Alternative would still result in an inconsistency with the scale and character of the rural surroundings, this impact would be slightly reduced from the proposed project due the reduced density. Potential short-term adverse scenic corridor impacts would still exist, but would be less significant than for the proposed project. The potential for inadequate design review would be the same as for the proposed project.

i. Population, Employment and Housing. The Reduced Density Alternative would result in fewer residential units than the proposed project, but the same amount of employment. As for the proposed project, no significant impacts related to population, employment, or housing would result with this alternative.

j. Public Services. The Reduced Density Alternative would increase demands on local police, fire, and recreational services; however, this demand would be slightly reduced in comparison to the proposed project. The potential impacts would be significant (without mitigation), as is the case for the proposed project.

k. Public Utilities. Under the Reduced Density Alternative, potable and reclaimed water would be used for the project site. Similar to the proposed project, this alternative would obtain potable water would from the City and would potentially obtain reclaimed water from NSD. The projected average potable water demand of 0.23 mgd would be completely offset through the use of on-site water saving devices and implementation of required retrofits pursuant to the City's Retrofit Program;<sup>2</sup> implementation of voluntary retrofits would not be required. However, as required for the proposed project, the applicant must obtain an approval letter from the City of Napa Department of Public Works under this alternative due to the City's current water supply deficit during drought conditions.

The Reduced Density Alternative would not reduce the public utilities impact associated with wastewater. The projected average wastewater generated by this alternative would be approximately 0.23 mgd (Table V-8). Wastewater generated from this alternative would be discharged to the NSD treatment plant. Similar to the proposed project, the alternative's wastewater flow could be reduced to 0.018 mgd through use of on-site water saving devices and implementation of required retrofits pursuant to the City's Retrofit Program (Table V-9). However, similar to the proposed project, voluntary additional retrofits would be needed in order to "net out" the remaining 0.018 mgd.

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<sup>2</sup> The applicant would be required to perform 2,661 retrofits under the City's Retrofit Program.

l. Noise. The elimination of Neighborhood 1 in the Reduced Density Alternative would leave only the Employee Housing area exposed to an  $L_{dn}$  in excess of 60 dB. Other noise impacts would be the same as for the proposed project.

m. Air Quality. This alternative would have slightly reduced construction-related impacts compared to the proposed project. Since the amount of construction would be reduced, the severity or duration of construction impacts would be slightly less. Local carbon monoxide impacts, which are proportional to peak-hour trip generation, would be slightly less than that of the proposed project. This alternative would result in about 240 pounds per day of ROG, 218 pounds per day of  $NO_x$  and 70 pounds per day of  $PM_{10}$ . These totals are about 20 percent less than those for the proposed project. Air quality emissions would exceed the BAAQMD thresholds of significance for ROG and  $NO_x$ . As for the proposed project, this alternative would have a significant adverse impact on regional air quality.

n. Public Health and Safety. All of the public health and safety impacts described for the proposed project would occur under the Reduced Density Alternative. None of the impacts would be substantially reduced by the design of the alternative. Similar to the proposed project, construction workers at the site could be exposed to asbestos and lead-based paint during demolition and residual agricultural chemicals or hazardous materials during grading and construction. However, the reduction in the areas of construction and number of constructed units under the alternative may result in a slight decrease in the opportunities or duration of the period of possible exposure. The use of hazardous materials and potential for releases would be similar to the proposed project.

## **F. Environmentally Superior Alternative**

In addition to the No Project Alternative, the Agricultural Alternative would be the Environmentally-Superior Alternative for the reasons described above and summarized in Table II-3 (Chapter II of the EIR). As shown in Table II, the Agricultural Alternative would result in fewer significant impacts related to the following:

- Agricultural/urban conflicts.
- Potential airport complaints.
- Emergency access.
- Traffic impacts at intersections.
- Construction traffic.
- Potential liquefaction impacts on utilities, parking lot and Interpretive Center.

- Fill in the flood plain.
- Stanly House and Cistern.
- Inconsistency with scale and character of rural surroundings.
- Potential inadequate design review.
- Increased recreational demands generated by residential uses.
- Current Napa Sanitation District plant capacity limits until improvements are constructed.
- Construction and agricultural operation-related noise.
- Air quality.

However, in comparison to the proposed project, the Agricultural Alternative would have increased impacts related to water quality degradation (due to use of pesticides and fertilizers); wetlands (due to agricultural uses in and adjacent to the Lowlands); tree removal (for both biological and historical reasons due to absence of replanting); salt marsh harvest mouse; nesting bird species; water supply; public health and safety related to use of agricultural chemicals and hazardous materials releases. While some impacts would be increased under the Agricultural Alternative, on balance, this alternative would be environmentally superior due to the significant number of reduced impacts compared to the proposed project.

In addition, the Agricultural Alternative (as well as the No Project Alternative) would not result in a significant unavoidable impact related to transportation, regional air emissions, or change in rural visual character, as would occur for the proposed project and all other alternatives after mitigation (see Table II-3).



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## Chapter VI CEQA-REQUIRED ASSESSMENT CONCLUSIONS

■ ■ ■

### A. Growth-Inducing Impacts

A project is considered growth-inducing if it could directly or indirectly foster economic or population growth. For example, extension of urban services into unserved areas would be considered factors that contribute to growth inducement. The following elements of the project could potentially have growth-inducing impacts:

- Extension of a wastewater main to the site from the Napa Sanitation District (NSD) facilities and expanding the Sphere of Influence for the NSD;
- Development adjacent to agricultural operations and at the City's edge;
- Development of residential units and a resulting increased on-site population that may require more commercial facilities for everyday needs;
- Development of an upscale tourist destination resort that may stimulate other winery projects in the vicinity;
- Development that may increase pressure to develop other southern areas within the City's RUL;
- Mitigation measures required for the project such as the widening of the SR 12/29/121 intersection to accommodate increased project-related and cumulative traffic.

Each of the above elements is discussed below.

1. Extension of Wastewater Main and Sphere of Influence of NSD. The first item mentioned above, the extension of an on-site wastewater main to serve the project, could have growth-inducing impacts primarily because the crossing of the Napa River with a new wastewater main would bring wastewater services closer to unserved portions of the City and County. This same impact would be associated with expanding the sphere of influence of the NSD to include the project site. While it is proposed that the sewer main only serve the project site, landowners in the immediate vicinity whose lands are currently not served by wastewater services and who rely on septic

systems may request to tie into the new service to allow increased development. This type of development pressure would be most likely for the area immediately west and north of the site which is predominantly agricultural at this time. However, these areas are nearly completely outside of the City limits and a number of approvals would be required for such development to occur. This potential growth-inducing impact would be less than significant for the following reasons: 1) existing City and County zoning and General Plan designations; 2) City and County policies about containing urban development within the Rural Urban Limit (RUL) line; and, 3) City's and County's track record over the past 20 years in maintaining the RUL to protect agriculturally-designated lands outside the RUL.

2. Increased Development Pressures on Agricultural Operations. With development of on-site uses adjacent to agricultural operations (primarily to the west and southwest of the site), landowners of such off-site areas may be under increasing pressure to take lands out of agricultural production if the following occurs from on-site development:
  - Complaints are filed by project residents due to annoyances associated with agricultural operations (noise, dust, pesticide applications); or
  - The economics of agricultural operations result in landowners preferring to develop lands into residential or commercial uses.

Without on-site development, existing areas of agricultural use (including the project site) are separated from the more urban areas of the City of Napa by major highways (SR 12 and 29), the Napa River and other agricultural lands. These physical barriers have kept these agricultural lands protected from the potential complaints that arise when a concentrated population occurs adjacent to agricultural operations. With the proposed proximity of the project to agricultural operations, landowners may have an incentive to request more intense development of their lands. However, as discussed above under No. 1, this potential growth-inducing impact would be less than significant for the following reasons: 1) existing City and County zoning and General Plan designations; 2) City and County policies about containing urban development within the Rural Urban Limit (RUL) line; and, 3) City's and County's track record over the past 20 years in maintaining the RUL to protect agriculturally-designated lands outside the RUL. In addition, mitigation measures proposed in Chapter IV.A, Impact LU-1, would act to minimize complaints from project residents.

3. Pressure of New Commercial Facilities to Serve Project Residents. The proposed project includes a small area for commercial uses to serve project residents. This area would occur in conjunction with the proposed winery

and wine center. However, residents would be required to drive more than two miles for everyday commercial needs provided by supermarkets, banks, dry cleaners, drug stores, video stores, and hardware stores. With an estimated on-site population of 1,515 persons, landowners of nearby commercially designated and zoned lands in the County could have an incentive to propose development of such commercial facilities. However, the two commercially zoned sites on Highway 12/121 are located 1.4 to 1.6 miles away from the site. New neighborhood shopping centers tend to require populations of 10,000+ and developers also prefer locations toward urban centers, as people have a tendency to travel towards more urban concentrations for their shopping (Recht Hausrath & Associates, 1986). Given the limited population at Stanly Ranch and in the vicinity, as well as the distance of these commercial sites from Stanly Ranch, it is considered unlikely that the project would significantly affect these sites; they would more likely be affected by the amount of highway passby traffic. An additional County site at Cuttings Wharf is zoned for commercial use. Vehicular access to this site is much farther away from Stanly Ranch by road than City commercial centers and the project's growth-inducing impact on this marina would be less than significant. Limited new pedestrian and bicycle traffic from and through the site might have a minor positive effect on commercial businesses in the Cuttings Wharf area, but it is not anticipated to be significant.

The four-acre "pumpkin patch" site to the north of Stanly Ranch is an unusual case. As a result of the Measure Z initiative approved in 1996, the allowable land uses on this agriculturally-zoned property within the City limits include the sale of agricultural produce and items related thereto, recreational and educational use of animals by children, and construction of buildings to accommodate permitted sales. The initiative applies to agricultural lands which have historically had such uses. Stanly Ranch would provide a limited added market for the sale of agricultural products on this site as permitted by Measure Z. The market for this site is currently limited to highway passby traffic. However, the initiative itself would prevent neighborhood commercial center use of the site. The potential growth-inducing impacts would be less than significant due to the size of the site and the potential allowable changes in land use.

There is a future city park site and a 5.8-acre, privately-owned property located on Golden Gate Drive near Stanly Lane which are in the City. These sites are currently designated "Study Area" in the adopted City *General Plan* and *Draft General Plan*, except that the City park site is designated "Public Serving" in the *Draft General Plan*. Before any development of the areas designated as "Study Area" could occur, a General Plan amendment would be



required. If the "Study Area" designation is ultimately amended, commercial uses might occur on this site. It is possible that the Stanly Ranch would have some effect on stimulating a General Plan amendment request for this parcel. However, due to the small size of the site, its location and the limited population at Stanly Ranch and environs, it is more likely to be desirable for highway or tourist-oriented uses than for commercial development to serve Stanly Ranch residents. Any proposals would be subject to environmental review, and the impact would be considered less than significant due to the small amount of acreage involved.

Given the factors mentioned above, the potential growth-inducing impacts related to new commercial facilities to meet project residents' needs would be less than significant.

4. Pressure for Additional Winery Development as a Result of the Project. Because the Stanly Ranch project would be an attractive tourist destination, it could be one factor in stimulating additional winery development on the Pumpkin Patch site, on the "Study Area" property in the City or on other agriculturally-zoned lands in the County. Such development is permitted with use permits throughout the County and is considered appropriate on agricultural lands providing that environmental concerns are addressed. It is unclear whether Measure Z would permit a winery on the Pumpkin Patch site without a use permit. Even without a use permit, development allowed by Measure Z is expected to be subject to State environmental review laws. While large expanses of agriculturally-zoned lands are located in the vicinity of the Stanly Ranch and within the County's jurisdiction, it is speculative to estimate how many proposals for new wineries could occur. Given the type of land use (i.e., winery) and the environmental requirements to which such development would be subject, growth-inducing impacts that the project might have regarding stimulating other wineries is not considered significant.
5. Increased Pressure to Develop other Southern Areas within the City RUL but Outside Current City Limits. About two-thirds of a mile north of the Stanly Ranch site, vacant lands are present between Foster Road and Golden Gate Avenue (south of Imola Avenue) which have been designated for medium- and high-density residential development since 1982. The *Draft General Plan* (City of Napa, 1996a) proposes that this area be designated for business park and varied residential development. These lands are outside the City limits but inside the RUL. The Stanly Ranch project could stimulate interest in development in this corridor. Whether and what type of development occurs in this area is a General Plan land use issue. The growth-inducing impact of the project is considered less than significant, given its distance from the area.

6. Development of Mitigation Measures Associated with the Project (SR 12/29/121 Intersection). Widening of the intersection to accommodate increased project-related plus cumulative traffic could have growth-inducing impacts, depending on the timing and the level of the improvement undertaken. If the improvement were staged incrementally to only accommodate the traffic to be generated by proposed projects, as they are developed, growth-inducing impacts would not be significant. However, if the interchange improvement were completed in its totality prior to buildout of the projected projects, it could have growth-inducing impacts because a potential "constraint" to development would be lifted. Given the expense involved in interchange improvements and the limited availability of highway funding, this improvement would likely be staged; thus, this potential growth-inducing impact would be less than significant.

## **B. Significant Irreversible Changes**

CEQA requires that EIRs assess whether the project will result in significant irreversible changes to the physical environment. The CEQA Guidelines describe three distinct categories of significant irreversible changes that should be considered, as further detailed below.

### **1. Changes in Land Use Which Would Commit Future Generations**

The proposed project would commit future generations to development on approximately 493 acres of the project site since it is unlikely to be economically feasible or prudent to restore that portion of the project site to its pre-development condition as undeveloped land in the foreseeable future. The proposed project would protect about 425 acres of the Lowlands portions of the project site as permanent open space.

### **2. Irreversible Changes from Environmental Accidents**

Irreversible changes to the physical environment could occur from accidental releases of hazardous materials associated with the project. However, compliance with regulations is expected to maintain this potential impact as less than significant.

### **3. Consumption of Nonrenewable Resources**

Consumption of nonrenewable resources includes increased energy consumption, conversion of agricultural lands, and lost access to mining reserves. The proposed project would require additional electric service. However, as discussed in the Public Utilities chapter of this document, PG&E is currently planning a system

upgrade at the American Canyon facility, creating enough additional capacity to handle the new energy demands created by this project. Mining reserves are not found on the project site; therefore, the proposed project would not result in lost access to mining reserves.

The Stanly Ranch project would result in the conversion of about 850 acres of land currently used for grazing and other agricultural purposes. About 425 acres of these lands are "Lowlands" (primarily jurisdictional wetlands). These lands are proposed to be preserved as open lands, but grazing would be removed.

### **C. Effects Not Found to be Significant**

An Initial Study (Appendix A) for the proposed *Draft SRSP* was prepared in order to determine the appropriate analytical scope for this EIR. The Initial Study was based on a preliminary review of issues related to the implementation of the *Stanly Ranch Specific Plan*. All CEQA-defined environmental factors were found to have potentially significant impacts in the Initial Study, except for potential impacts to energy and mineral reserves. Mineral reserves are not located on the project site. Although less-than-significant, the EIR addresses the potential for energy conservation and recycling. Source reduction/recycling, and energy conservation conditions of approval are identified in the Public Services and Public Utilities sections of Chapter IV.

### **D. Cumulative Impacts**

CEQA defines cumulative impacts as "*two or more individual effects which, when considered together, are considerable, or which can compound or increase other environmental impacts.*" (CEQA Guidelines Section 15355). The cumulative impacts from several projects is the change in the environment which results from the *incremental impact of the project* when added to other closely related past, present, and reasonably foreseeable probable future projects (emphasis added). Section 15130 of the CEQA Guidelines requires that an EIR evaluate potential environmental impacts that are individually limited but cumulatively significant. These impacts can result from the proposed project alone or together with other projects.

When evaluating cumulative impacts, CEQA allows the use of either a list of reasonably anticipated relevant projects, including projects outside the control of the lead agency, or a summary of projections in an adopted planning document or related planning document designed to evaluate regional or areawide conditions. This cumulative impacts analysis uses information provided by the City of Napa and



contained within the City's *General Plan Draft Policy Document* and related land use projections contained in the Congestion Management Agency traffic model. The time frame for the analysis in the cumulative impacts section is through the year 2020, which is the time frame examined in the City's *General Plan Draft Policy Document*. The three exceptions are the Land Use, Traffic and Circulation, and the Air Quality cumulative analyses, which are applied through the year 2010, the projected year of buildout of the proposed project. Each of the environmental topic areas analyzed in Chapter IV is considered below for potential cumulative impacts.

Future development anticipated within the project buildout horizon (2010) is described below for lands within the jurisdiction of the City of Napa and lands within the County of Napa. Potential developments described below were provided by the City and are derived from County *General Plan* land use projections and the City's *Draft General Plan* land use projections used for the Countywide Congestion Management Agency (CMA) traffic model (City of Napa, 1997).

The cumulative impacts which may be significant are related to transportation, water quality, biological resources (listed fish species), cultural resources, and air quality.

## **1. City of Napa Land Uses**

Potential change areas throughout the remainder of southern Napa include:

- The Napa Valley Corporate Park to the east of the *Draft SRSP* area where buildout may add over one million square feet of office, manufacturing, warehousing and limited retail development;
- A 25 percent increase in Napa Valley College enrollment;
- The South Napa Marketplace, located north of Imola Avenue and east of the Napa River, where completion will consist of Home Depot and up to 20,000 square feet of additional retail space;
- The Golden Gate Avenue area located east of Foster Road where there is an estimated potential for an additional 400 homes (this area is outside the current City limits but is within the adopted Rural Urban Limit Line);
- Limited residential "infill" development throughout southern Napa and additional office and retail "infill" development both south of downtown and east of the Napa River; and
- Two small parcels immediately north of the Stanly Ranch on Golden Gate Avenue, one of which is owned by the City and planned for park use. The other 5.8-acre property is proposed for designation as "Study Area" in the *Draft General Plan* (Hasser, 1998).

## 2. County of Napa Land Uses

The major land use changes within unincorporated County lands surrounding the *Draft SRSP* are anticipated to be the Airport Industrial Park and its environs. The projections derived from the CMA's traffic model land use assumptions suggest that over one million square feet of office, manufacturing, warehousing and limited retail uses, as well as 455 hotel rooms and 600 restaurant seats could be added in this area by 2010. The CMA's land use assumptions also project another 126,000 square feet of warehouse, industrial and office uses in the Kelley Road area by 2010.

However, based on communications with County staff, these projections describe a reduced amount of development compared to what is allowed under the County's adopted *General Plan* or what may actually occur in the airport industrial area. The County is currently preparing an update of the *Airport Industrial Park Specific Plan* (which has not yet been adopted). This *Airport Industrial Park Specific Plan* addresses development in the 2,700-acre area south of SR 29/12's southern crossing of the Napa River, including the airport and adjoining business parks. The most recent available draft of the *Airport Industrial Park Specific Plan* update projects a demand for industrial construction within the Airport Industrial Park (which is inclusive of the Kelley Road Area) of between 2.6 and 3.1 million square feet for the period 1998 to 2010 (Napa County, 1997). The land use program designates sufficient land to accommodate high-range projections for industrial demand through 2015. The land use program would also designate land to accommodate 250,000 square feet of projected support commercial development and would reserve lands for future industrial development beyond 2015.

Little overall change is anticipated to occur in the vineyard area west and northwest of the *Draft SRSP* area. However, a few commercially zoned parcels (primarily in the vicinity of SR 12/121), and the Pumpkin Patch site south of Golden Gate Drive and north of the site, have been the subject of a variety of proposals which have, for various reasons, not progressed to planned projects. It is reasonable to expect that limited additional development may occur on these commercially-zoned or used parcels by 2010. It should also be noted that the California Department of Forestry and Fire Protection (CDF) is considering the construction of a CDF fire station in the vicinity of the intersection of Old Sonoma Road with Old Sonoma Highway, just over 1.5 miles west of the project site.

No changes are projected for the low-lying, agricultural floodway/floodplain areas north of Stanly Ranch (Hasser, 1997) nor are airport operations expected to significantly increase over this period (Toth, 1997; Gillfillen, 1998).

### 3. Land Use

a. Cumulative Impacts. In recognition of the scenic, economic and open space benefits provided by its agricultural lands, Napa County and the City of Napa have used the concept of urban-centered growth surrounded by a greenbelt. This concept calls for urban development to occur within cities, communities to be separated by open space, and definitive boundaries to delineate urban areas from rural/agricultural areas. The Stanly Ranch is within the City and its RUL and would not significantly affect the development pattern of other lands within and outside the RUL (as also described above in relation to growth-inducing impacts).

As incorporated communities build out, land use compatibility impacts occur at the urban/agricultural edge. These land use conflicts arise as urban uses develop adjacent or close to cultivated areas where spraying, noise or dust from agricultural operations can result in complaints. This cumulative significant effect is mitigated through agricultural buffers, deed notices, and reduced densities near the cities' RUL as proposed in this project. (LTS)

From an airport land use compatibility standpoint, most other planned vicinity land uses are agricultural, commercial (including hotels), and industrial. Cumulative impacts related to noise or overflight annoyance should therefore be no greater than for the proposed project and mitigated by the Napa County ALUC Plan policies and restrictions.

b. Mitigation Measures. No mitigation measures would be necessary for cumulative land use impacts. (LTS)

### 4. Public Policy

a. Cumulative Impacts. As for the proposed project, cumulative projects could result in conflicts with policies of the City's *General Plan* or the *Napa County General Plan*. However, such conflicts would be evaluated when specific details about projects are evaluated as part of the project review process and if conflicts occur, *General Plan* amendments/environmental review would be required. All of the cumulative projects described above would be in conformance with land use designations established by the City and County. (LTS)

b. Mitigation Measures. No mitigation measures would be necessary for cumulative public policy impacts. (LTS)



## 5. Transportation and Circulation

- a. Cumulative Impacts. Growth anticipated through the City, County and region would add to traffic congestion, particularly on major routes. Since impacts on the transportation system cannot be evaluated in isolation, the traffic analysis for this EIR utilized (with updated traffic counts) the Countywide Congestion Management Agency Traffic Model. With implementation of mitigation measures in this EIR, as well as proposed improvements called for in the City General Plan and paid for by City Street Improvement Fees, impacts to streets are mitigated over time to a less-than-significant level. (The exception is SR 12/121/29, which is currently operating at LOS F; however, the proposed project has a less-than-significant impact on this intersection.) Nevertheless, uncertainty of funding for some designated transportation improvements would not reduce impacts to a less-than-significant level, at least in the short term. Thus, this cumulative impact remains potentially significant after mitigation. (S)
- b. Mitigation Measures. Refer to Mitigation Measure TRAFFIC-3, TRAFFIC-4 and TRAFFIC-5 in Section IV.C of the EIR. (PS)

## 6. Geology, Soils and Seismicity

- a. Cumulative Impacts. The City of Napa includes geologic and seismic settings similar to and near the project site. Therefore, this area is defined as the cumulative impact area for the purposes of the analysis of the potential for cumulative impacts associated with geologic and seismic hazards. Development outlined in the City's *Draft General Plan* which covers the period through the year 2020, is the basis for this cumulative analysis.

The *General Plan* specifically addresses the potential for geologic and seismic conditions which could affect the stability of structures and the safety of residents. *General Plan* policies would apply to all new City developments as well as Stanly Ranch, and would ensure that geologic and seismic hazards at the location of specific future development projects would be identified and addressed. Implementation of these policies would reduce the potential for adverse seismic and geologic conditions to significantly affect projects within the cumulative area. Therefore, the cumulative impact is less than significant. (LTS)

- b. Mitigation Measures. No mitigation measures would be required for cumulative geologic, soils, and seismicity impacts. (LTS)

## 7. Hydrology, Drainage and Water Quality

a. Cumulative Impacts. For the purposes of this analysis, the area of consideration of potential cumulative impacts is the Napa River watershed (approximately equivalent to the areas encompassed by the City and County of Napa). It is recognized that the extreme lower portion of the Napa River watershed is in Solano County, but the channel is so wide in this reach that new development is unlikely to result in measurable increases in flood elevations.

Significant impacts discussed in the Hydrology, Drainage and Water Quality section of this *Draft SRSP EIR* (Section IV.E) include: 1) potential increased flooding from placement of fill in the floodplain, or increased runoff from new impervious surface area; 2) degradation of water quality from construction and operation phases; and 3) failure of the unengineered levee along the river. Of these identified impacts, water quality degradation resulting from cumulative development and increased flooding resulting from increased runoff volumes could contribute to a cumulative impact. Any failure of the levee at Stanly Ranch is expected to have minimal effect (or perhaps a slight beneficial effect) on regional hydrology and flood water conveyance. Implementation of the extensive proposed Water Quality Management Plan and mitigations required in this EIR are expected to reduce or eliminate potential impacts associated with degradation of water quality. However, to be conservative in the analysis, the potential impact related to water quality would remain "potentially significant" because in the absence of definitive information regarding assimilative capacity of the Napa River, the impacts to the quality of the receiving waters cannot be guaranteed to be less than significant after mitigation.

Requirements for "no net fill" in the floodplain resulting from project activities eliminates the potential impacts associated with loss of floodplain storage.

The hydrology analysis conducted for the project site (Impact HYDRO-A in Section IV.E) and discussed in this section indicates that the increased contribution to peak flow (during the 100-year storm) in the Napa River resulting from on-site development is calculated to be 1.06 cfs. Based on a Corps rating curve for Edgerly Island,<sup>1</sup> the 1.06 cfs increase in the peak flow in the Napa River would raise the 100-year flood elevation at Edgerly Island by 0.00002 feet (Philip Williams & Associates, 1997). This increase, considered by itself, was determined to be less than significant.

For a cumulative impact to occur, other development projects would have to be proposed and constructed within the watershed and result in significant increases in

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<sup>1</sup> Edgerly Island was the development determined to be the most susceptible to flooding that could be affected by implementation of the *Draft Stanly Ranch Specific Plan*.

runoff volume by the year 2020. It is expected that the vast majority of development within the watershed would occur within the City and County of Napa.

The County of Napa Ordinance No. 1095 (section 16.04.560 [C][1][b]) contains a provision that requires new development projects within County jurisdiction (the *Draft SRSP* is not within the County jurisdiction) to demonstrate that the development would not result in an increase in the base flood elevation. Although the City of Napa has no similar ordinance, the City has established a precedent of no net increase in peak discharge (and therefore base flood elevation) by certification of the *Big Ranch Specific Plan EIR* (City of Napa, 1996). The *Big Ranch Specific Plan EIR* (and this *Draft SRSP EIR*) contain significance criteria which designate an increase in peak discharge a significant impact. With ordinances and precedents in place, new developments are precluded from creating, or contributing to, cumulative impacts. Additionally, the passage of the Flood Control Project is expected to result in new standards regarding no increase. A *Draft General Plan* policy added by the Planning Commission in June, 1998, also points to the new standards, stating: "The City shall recognize new considerations identified and created by the Napa River Flood Control project, such as strengthening watershed protection, in making future decisions."

In practical terms, the accuracy of hydrologic analysis and calculation in determining extremely small increases in flood elevation exceeds the capability of conventional surveying to measure these increases in the field. Even though the County and the City require "no net increase in base flood elevations," this must be interpreted as "no net discernable or appreciable increase". For example, hydrologists could calculate an increase in flood elevations associated with a homeowner laying a small brick patio adjacent to his/her driveway within the watershed. Most would agree that the increase in flood elevations associated with the new patio would not be considered significant. Similarly, 100 to 1,000 projects similar to the development proposed by the *Draft SRSP* would be required before flood elevation increases would approach a discernable level (0.02 to 0.002 feet).<sup>2</sup> It is not anticipated that 100 to 1,000 development projects could be completed prior to 2020, if ever. Therefore, the incremental impact of the *Draft SRSP* when added to other cumulative development, is not expected to result in cumulative impacts associated with increased flood elevations, and the project's incremental impact would not be "cumulatively considerable". (LTS: Drainage; S: Water Quality)

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<sup>2</sup> A precedent was established in the City of Napa *Big Ranch Specific Plan* that stated that an increase in post-project flood elevation of less than 0.05 feet would be considered less than significant.



b. Mitigation Measures. No mitigation measures, beyond those already proposed for the project and incorporated into the City's and County's policies and regulations, would be required as related to potential increased flooding. No additional water quality mitigation measures would be required. However, because water quality impacts to receiving waters cannot be guaranteed to be less than significant with cumulative development, this impact would remain potentially significant. (PS)

## 8. Biological Resources

a. Cumulative Impacts. The cumulative impact analysis for biological resources relies on the *City of Napa General Plan DEIR* (City of Napa, 1996d). This EIR identifies impacts for the project site as well as other areas within the City. Impacts could occur to sensitive species such as Mason's lilaeopsis (also identified for the project site) and salt marsh species. In addition, native terrestrial vegetation and habitats within the RUL could be damaged or eliminated by future development. However, the incremental effect of the project, when viewed in connection with cumulative projects, would be less than significant with incorporation of mitigation measures proposed for the project.

Policies of the City's adopted *General Plan* and mitigation measures recommended in the City's *General Plan EIR* (City of Napa, 1996d), in addition to those recommended for the proposed project, would reduce cumulative biological impacts. These include maintaining information about species, referring development proposals regarding sensitive plants and wildlife species to state and federal agencies, and protecting and restoring riparian and onsite habitat. The City's *General Plan EIR* also recommends that the City apply special development standards to wetlands and critical wildlife habitat and protection of rare or endangered species. Policies in the *Draft SRSP* and specific mitigation measures in this EIR are consistent with these measures. The above *General Plan* measures would apply to cumulative projects to reduce potential cumulative biological impacts.

Biological impacts related to water quality and listed fish species would remain potentially significant on both a cumulative and project-specific level because in the absence of definitive information regarding the assimilative capacity of the Napa River, the water quality impacts on the receiving waters cannot be guaranteed to be less than significant in terms of impacts on listed fish species. (S)

b. Mitigation Measures. All biological mitigation measures for the project shall be implemented to minimize the potential for cumulative impacts on biological resources. While most biological impacts are less than significant, cumulative impacts would remain potentially significant because the quality of the receiving

waters cannot be guaranteed to be less than significant in terms of impacts on listed fish species. (PS)

## **9. Historic and Cultural Resources**

a. Cumulative Impacts. In the absence of stringent local historic preservation ordinances or regulations, the project, in conjunction with cumulative development, could cumulatively diminish the shared cultural heritage and number of historic structures in Napa County. Furthermore, the natural setting is archaeologically sensitive. The project's impacts on site historic and historic archaeological resources may be significant, depending on mitigation measures ultimately selected and if archaeological resources unearthed during construction qualified as historical resources. (Recordation accompanied by destruction of the historic resource would result in the impact remaining potentially significant.) Due to this, the project's incremental impacts, when viewed in conjunction with other projects, are also considered potentially significant. (S)

b. Mitigation Measures. No additional mitigation measures other than those required for the project would be required. (PS)

## **10. Visual Quality**

a. Cumulative Impacts. The area considered for the cumulative visual impacts analysis extends to the immediate vicinity of Stanly Ranch, as seen from key viewpoints such as SR 12 and SR 29. As discussed in the visual impacts section of this document (Section IV.H), because of topography, vegetation, and site design, portions of developed areas of the project site would be visible from key public viewpoints. For the most part, visual impacts are reduced to a less than significant level with proposed mitigation measures, especially after five years of tree growth. The one visual impact which is not reduced to a less-than-significant level is the change in overall visual character of the site from rural to urban. Cumulative projects would not affect the immediate vicinity's visual characteristics and the project's incremental visual impacts, when viewed in conjunction with cumulative impacts, would be no greater than for the project alone. (S)

b. Mitigation Measures. No additional mitigation measures for cumulative visual impacts would be necessary. (SU)

## **11. Population, Employment and Housing**

a. Cumulative Impacts. The *Draft Policy Document* projects an additional 7,840 units of residential housing by the year 2020. The proposed project accounts for 600 units or 7.5 percent of this total. Because the City's adopted *General Plan* identifies the site as "appropriate for urban development" and because the project stays within ABAG regional population projections, the proposed project would not result in significant cumulative housing or population impacts.

The proposed project would provide new housing opportunities for workers in the City of Napa. Fifty-four employee housing units would assist the City in meeting its "fair share" housing goals for low and lower-income workers. (LTS)

b. Mitigation Measures. No mitigation measures for cumulative population, employment, and housing impacts would be necessary. (LTS)

## **12. Public Utilities**

a. Cumulative Impacts. Anticipated growth in the City's water service area would result in an additional demand for water which results in potential water deficit during drought conditions through the year 2012. After that time, due to increasing entitlement increases from the State Water System, the City would have sufficient supplies to meet drought year demands. The potentially significant cumulative impact described by the *General Plan EIR* consists of potential loss of landscaping during drought years due to landscape irrigation cutbacks; there would be sufficient water to meet basic health, hygiene and safety needs. However, the project itself would not contribute to this potentially significant cumulative effect due to mitigation measures identified in Chapter IV.K and, therefore, the project's incremental water supply impacts, in conjunction with cumulative impacts, would be less than significant.

In addition, a cumulative impact could result if the NSD facility were not able to provide wastewater treatment, storage, and disposal services to its existing service area and developments discharging wastewater to NSD. As indicated in Section IV.K (Public Utilities) of this EIR, the proposed modifications to expand the NSD facility capacity while underway, are not completed. At the time of the writing of this EIR (1998), the NSD facility did not have adequate capacity to process wastewater flows or BOD loading during winter months. If critical capacity problems existed at the time the proposed project were closer to construction, an alternative on-site wastewater plant would be implemented in order to not impact NSD facilities (as discussed in Chapter V of the EIR).



Given the City's policies and programs to ensure that adequate utilities are available to serve cumulative development and the project's proposed mitigation measures, the project's incremental impact on public utilities would be less than significant, when viewed in conjunction with cumulative projects. (LTS)

- b. Mitigation Measures. No additional mitigation measures regarding cumulative public utility impacts would be necessary. (LTS)

### 13. Public Services

- a. Cumulative Impacts. According to the *City of Napa General Plan DEIR* (City of Napa, 1996d), cumulative impacts to public services are unlikely in coming years if upgrades to services and facilities are made to accommodate projected growth. Although increased development and population growth would result in an increased number of calls for service from emergency personnel, response times for police and fire services are not expected to be adversely affected because policies and programs in the City's *Draft Policy Document* and those included in this EIR provide for the adequate provision and administration of emergency services, commensurate with development.

Together with development accommodated by the *Draft Policy Document*, pre- and post-buildout of the Stanly Ranch project would increase the amount of solid waste produced by the City's population. However, the Roosevelt Regional Landfill (to which Napa's waste is shipped) is not expected to reach capacity until 2034. Recycling policies and programs implemented by the City would ensure that the provision and administration of adequate solid waste disposal services are commensurate with development in the City to the year 2020.

Although CEQA analysis is not required for impacts to quality of life issues related to overcrowding, it is important to note that development of Stanly Ranch and other parts of the City would increase demand on schools and parks. Because the public school system is currently operating at capacity, increased demand may result in system overcrowding. School and Park fees levied on new development, as well as trail policies of the City's *General Plan* are intended to help address these concerns. Mitigation measures outlined in Section IV.J (Public Services) of this EIR would reduce the project's incremental contribution to cumulative public service impacts to a less-than-significant level. (LTS)

- b. Mitigation Measures. No additional mitigation measures for cumulative public service impacts would be necessary. (LTS)

#### 14. Noise

- a. Cumulative Impacts. For the purposes of the acoustical analysis, cumulative impacts would be the same as those described for the proposed project. The analysis of traffic noise impacts, as described in Section IV.L of this EIR, indicate that, under cumulative traffic condition in the year 2010, traffic noise impacts be less than significant except for traffic on Stanly Lane. However, with implementation of the mitigation measures identified in Chapter IV, the project's incremental impact to cumulative noise impacts would be less than significant. (LTS)
- b. Mitigation Measures. No additional mitigation measures for cumulative noise impacts would be necessary. (LTS)

#### 15. Air Quality

- a. Cumulative Impacts. BAAQMD guidance states that any proposed project that would individually have a significant air quality impact, based on BAAQMD thresholds of significance, would also be considered to have a significant cumulative air quality impact.

Projected year 2010 local carbon monoxide concentrations assumed under cumulative traffic conditions were analyzed and discussed in Section IV.M (Air Quality). Since project concentrations do not exceed the ambient air quality standards, the project's cumulative impact on local carbon monoxide concentrations is considered to be less than significant. However, project-related regional emissions exceed the significance thresholds for ozone precursors and PM<sub>10</sub>. Based on the BAAQMD's cumulative impact threshold of significance, the project would also have a significant cumulative impact on regional air quality. (S)

- b. Mitigation Measures. No additional mitigation measures, beyond those identified for the project (see Chapter IV of the EIR) would be necessary. (SU)

#### 16. Public Health and Safety

- a. Cumulative Impacts. In conjunction with the development of future projects, implementation of the *Draft SRSP* could result in a cumulative increase in the exposure of people or the environment to hazardous materials. Development proposed under the *City General Plan* defines the area of study (and projects) for the cumulative impact analysis of public health and safety issues. These projects may include management of and exposure of people or the environment to hazardous materials similar to those described in the analysis of the *Draft SRSP*.

The *General Plan* describes City policies and implementation programs for managing hazardous materials in order to reduce the potential impact of releases of these materials to the environment. Specifically, these policies address continued support of the County's proposed Integrated Waste Management Plan and Certified Unified Program Agency for local implementation of hazardous materials regulation and emergency preparedness and response for hazardous materials incidents. These policies and programs would help to reduce impacts related to potential releases of hazardous materials. The County Department of Environmental Management coordinates with the County Agricultural Commissioner's Office to implement hazardous materials programs. The Department of Environmental Agency reviews all discretionary development applications and is in charge of reviewing mitigation measures and establishing conditions of approval related to hazardous materials for individual projects, such as the mitigation measures proposed for this project. (LTS)

Some future developments may involve construction of projects on former agricultural lands or demolition of buildings or other structures containing hazardous materials (e.g. lead-based paint or asbestos containing materials). Depending on site-specific conditions, uncontrolled release of these materials to air, soil, or water could potentially result in cumulative human or environmental health risks within portions of the General Plan area. However, the project's incremental impacts, in relation to such cumulative impacts, would be less than significant. (LTS)

b. Mitigation Measures. No additional mitigation measures, beyond those identified in Chapter IV, would be necessary. (LTS)



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## Chapter VII REPORT PREPARATION

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### A. Report Preparers

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St. Helena, CA 94575

**Shutt Moen Associates:** *Airport Issues Analysis*

707 Aviation Boulevard  
Santa Rosa, CA 95403

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**Appendix A**  
**NOTICE OF PREPARATION/INITIAL STUDY**

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## NOTICE OF PREPARATION

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TO:

FROM: City of Napa Planning Dept.  
1600 First Street, PO Box 660  
Napa, CA 94559-0660

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**Lead Agency:**

City of Napa Planning Dept.  
1600 First Street, P.O. Box 660  
Napa, CA 94559  
(707) 257-9530

**Consulting Firm:**

Brady/LSA  
2215 Fifth Street  
Berkeley, CA 94710

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**Subject: Notice of Preparation of a Draft Environmental Impact Report**

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The City of Napa will be the Lead Agency and will prepare an environmental impact report for the project identified below. We need to know the views of your agency as to the scope and content of the environmental information which is germane to your agency's statutory responsibilities in connection with the proposed project. Your agency will need to use the EIR prepared by our agency when considering your permit or other approval for the project.

The project description, location, and the probably environmental effects are contained in the attached materials. A copy of the Initial Study is attached.

Due to the time limits mandated by State law, your response must be sent at the earliest possible date but *no later than 30 days* after receipt of this notice.

Please send your response to Jean Hasser at the address shown above. We will need the name for a contact person in your agency.

**PUBLIC NOTICE:** There will be a public scoping meeting on September 17 at 7 pm to provide an added opportunity to identify actions, alternatives, mitigation measures or significant effects to be analyzed in the EIR.  
Meeting Location: Napa City Hall, Council Chambers, 955 School Street, Napa, California  
You are invited to attend.

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**Project Title:** STANLY RANCH SPECIFIC PLAN EIR

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**Project Location:** Southern portion of City of Napa along Stanly Lane. APNs 47-230-05; 47-240-010 through 015; 47-262-001

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**Project Applicant:** Carneros Valley Investors

**Project Description:** A Specific Plan, General Plan Amendment, rezoning and Development Agreement and other City, County, State & Federal entitlements necessary to permit a resort, golf course, wine center, winery, residential and open space project as described in the initial study.

Date:

August 28, 1997

Signature:

Jean Hasser

Title: Associate Planner



## I. INTRODUCTION

In accordance with the California Environmental Quality Act (CEQA) and its Guidelines, the following Initial Study has been prepared to assist in the identification of the required scope of an Environmental Impact Report (EIR), and to identify the major issues that will be addressed in greater detail in the EIR. The Initial Study includes a description of the proposed project and the location of the project site, preliminary evaluation of the potential environmental impacts, and the findings from the environmental review.

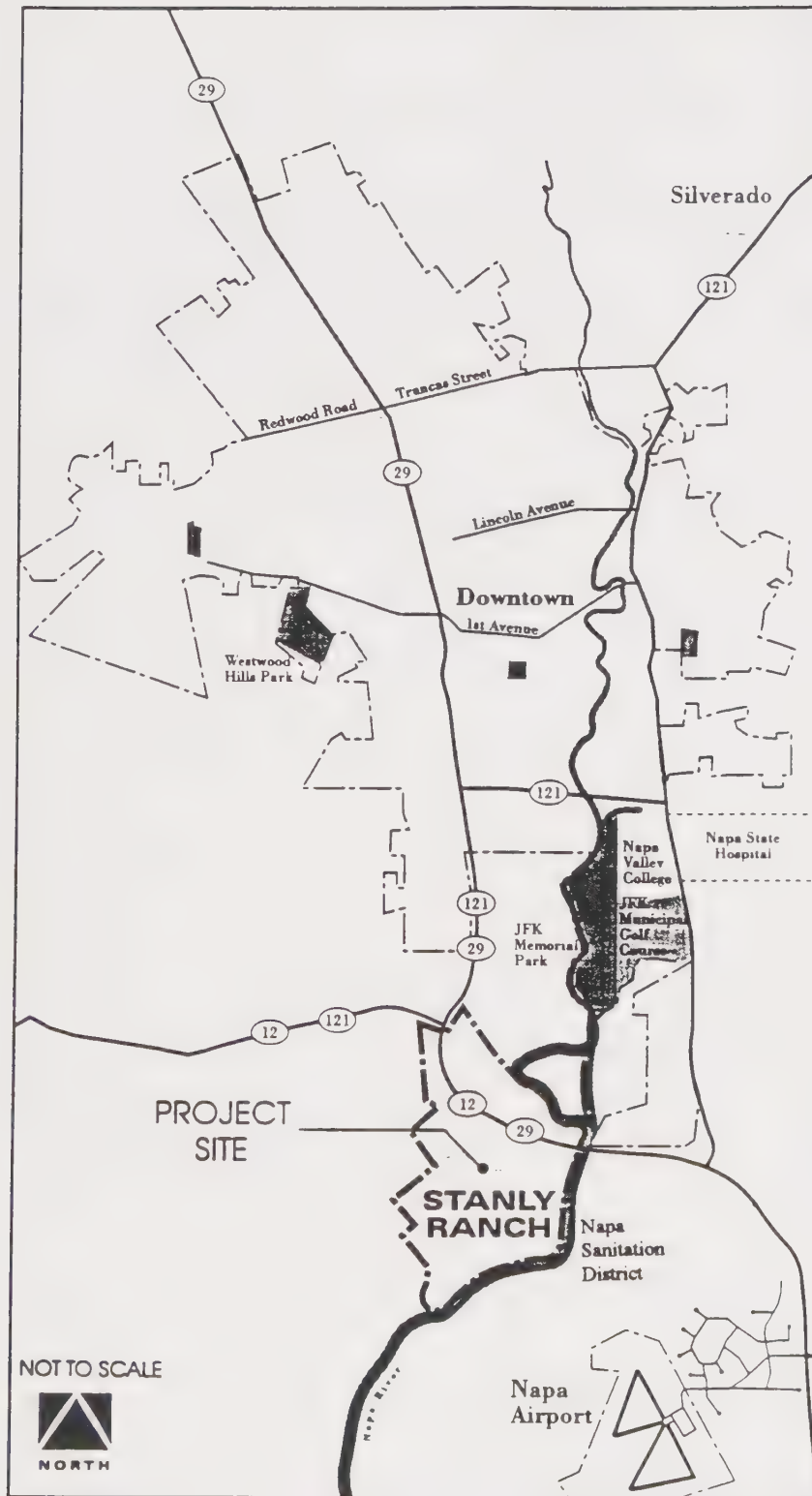
The Notice of Preparation and the accompanying Initial Study specifically examine the potential level of environmental impacts that may result from the Project, including cumulative impacts. These two documents are subject to review by responsible agencies, interested agencies, groups and the public at-large.

Narrative discussion supporting each checklist conclusion is provided for each topical assessment area. This discussion also identifies the major issues that will be addressed in the EIR. Sources supporting checklist conclusions are referenced following the discussion for each topical assessment area. The proposed scope of work for the EIR is attached as Appendix A to provide additional description of the anticipated depth and breadth of the EIR.

Note: To save on reproduction, Appendix A is available at the City of Napa Planning Department, with other EIR materials.

## II. CEQA CHECKLIST/INITIAL STUDY

1. **Project Title:** Stanly Ranch Specific Plan EIR
2. **Lead Agency Name and Address:** City of Napa  
1600 First Street  
PO Box 660  
Napa, CA 94559-0660
3. **Contact Person and Phone Number:** Jean Hasser; (707) 257-9530
4. **Project Location:** Southern Napa, along Stanly Lane south of SR12/121  
(See Figure 1. Project Vicinity)
5. **Project Sponsor's Name and Address:** Carneros Valley Investors  
1451 Stanly Lane  
Napa, CA 94558  
Contact: Mr. Tom Kambe
6. **General Plan Designation:**  
**Adopted General Plan:** SA/Study Area  
  
**Envision 2020,  
Draft Policy Document:** Single Family Residential (SFR)  
Single Family Infill (SFI)  
Tourist Commercial (TC)  
Public Serving Uses (PS)
7. **Zoning: Existing:** Planned Community (P-C); and  
Planned Community/Flood Plain (P-C:FP)  
  
**Proposed:** Specific Plan District  
SP 97-050



SOURCE: EDAA

Figure 1  
PROJECT VICINITY



8. **Description of Project:** The applicant has prepared a draft Specific Plan that proposes the construction of a resort and golf course, tourist commercial area, residential community, and designated open space on a 918 acre parcel of land in the southernmost portion of the City of Napa (See Figure 1) Square footage, units and acreage for each element of the proposed plan are summarized in Table 1 and an Illustrative Site Plan is shown in Figure 2. Access to the site would be via Stanly Lane which connects to State Route 12/121. An EIR will be prepared for the project to evaluate the following elements:
- 1) Specific Plan land use and policy proposals; 2) General Plan amendment; 3) rezoning;
  - 4) Development Agreement; 5) annexation to the Napa Sanitation District, which is the preferred wastewater treatment provider, or, alternatively, obtainment of a Waste Discharge Requirements permit from the Regional Water Quality Control Board to operate an onsite wastewater treatment/reclamation facility to process wastewater generated onsite for land application on the golf course and the landscaped areas within the project; and 6) other local, State and Federal entitlements necessary to permit the project, as listed in Section 10 below.

**Resort Area.** The resort, located in the west central part of the site, would include the following elements; a main lodge (with restaurant, conference facility and retail uses); spa (with swimming pool and tennis courts); 200 guest cottages and 100 resort homes, 25 of which are anticipated to be managed as Carefree Club units; a golf course clubhouse (with restaurant and golf shop); and a maintenance facility. For all uses within the resort area, 385 parking spaces would be provided.

**Residential Area.** The residential portion is proposed to include up to 540 for sale homes in five neighborhoods; and 54 employee housing units. Densities for the five individual neighborhoods would range from 3-7 units per gross acre. In addition to off-street parking on individual residential lots, 135 parking spaces would be provided in designated parking areas for guests, and 100 onsite spaces would be provided for the employee housing.

**Panhandle Area.** The Panhandle Area, located at the northwest end of the site, adjoining Stanly Lane near State Route 12/121, would include a winery and a wine center up to 40,000 square feet each, on 12 acres. Two hundred sixty (260) parking spaces are proposed for these uses.

**Employee Parking and Onsite Roads.** A 200 space parking lot would be provided for employees at the southern end of Stanly Lane. Employees would be shuttled in small vans from the parking area to resort destinations. The main entry road to the site would be Stanly Lane, heading south from SR 12/121. It would connect to a second main road, Old Soscol Road, which would be the main entry road to the resort and residential neighborhoods. These roads would be improved for the project and would connect to new local roads providing access to the resort and residential neighborhoods. An emergency access connection would be provided to Cuttings Wharf Road from the western end of the site.

**Table 1**  
**Stanly Ranch Project Summary Information**

Area	Subarea	Acreage	Percent of Total	Square Footage	Units	Notes
Resort <sup>1</sup>	Main Lodge			12,000		220 seats; includes kitchen
	-Restaurant			1,200		
	-Retail			14,000		Ballroom and meeting rooms
	-Conference Facility			18,000		Office, maintenance, lobbies
	-Support					
	Spa			12,000		Treatment rooms, exercise rooms, and related services; pool and tennis=additional square footage
	Guest Cottages				200	800 sq. ft. each
	Resort Homes				75	2,300 sq. ft. each
	Carefree Club				25	1,800 sq. ft.
	Golf Course Clubhouse					170 seats
	-Restaurant			4,600		
	-Golf Shop			1,200		
	-Miscellaneous Support			5,200		
	Maintenance			4,500		
	<b>Subtotal for Resort Area</b>	<b>58</b>	<b>6.3</b>	<b>72,700</b>	<b>300</b>	
<b>Panhandle Area</b>						
	Wine Center	6.9		40,000		Retail, restaurant, and commercial
	Winery	4.9		40,000		Complete wine-making functions
	<b>Subtotal for Panhandle</b>	<b>12</b>	<b>1.3</b>	<b>80,000</b>		
<b>Residential Area<sup>2</sup></b>						
	Neighborhood 1	19			97-116	Villa Homes and Vineyard Homes <sup>3</sup>
	Neighborhood 2	34			133-158	Vineyard Homes and Villa Homes
					64-96	Townhomes
	Neighborhood 3	20			82-97	Villa Homes and Vineyard Homes
					32-48	Townhomes
	Neighborhood 4	20			67-102	Vineyard Homes and Custom Homes
	Neighborhood 5	9			30-46	Custom Homes and Vineyard Homes
	<b>Subtotal for Residential Area</b>	<b>102</b>	<b>11.1</b>		<b>505-663<sup>4</sup></b>	Gross area densities will range from 3 to 7 units per acre
	<b>Employee Housing</b>	<b>3</b>	<b>0.3</b>		<b>up to 54</b>	Gross densities up to 18 units per acre

<sup>1</sup> Resort acreage includes part of the golf course.

<sup>2</sup> Residential acreage includes 2.5 acres for neighborhood parks which is shown under open space acreage.

<sup>3</sup> Custom Homes have an average lot size of 9,000 sq. ft. to 1 acre and home sizes from 2,800 to 3,800 sq. ft.; Vineyard Homes have an average lot size of 6,000 to 8,000 sq. ft. and homes from 2,300 to 3,200 sq. ft.; Villa Homes have an average lot size of 5,000 to 6,000 sq. ft. and homes from 1,900 to 2,500 sq. ft.; Townhomes have an average lot size of 3,500 to 5,000 sq. ft. and homes from 1,500 to 2,300 sq. ft.

<sup>4</sup> The exact number of units will vary by neighborhood but will not exceed a maximum of 540 for-sale residential units and 54 employee housing units. The Draft G.P. Policy Document permits up to 600 units at Stanly Ranch.

Area	Subarea	Acreage	Percent of Total	Square Footage	Spaces	Notes
<b>Parking</b>						
	Resort Area				385 spaces	For all uses in Resort Area
	Residential Neighborhoods				Onsite pkg + 235 sp.	Includes onsite parking for for-sale units plus 135 guest spaces in designated areas; 100 onsite spaces for employee housing
	Panhandle				260 sp.	160 for Wine Center, 100 for Winery
	Employee Parking Lot				200 sp.	
	Environmental Interp. Center				20 sp.	10 for Center, 10 for public access
	Subtotal for Parking				1,100 sp.	
<b>Roads</b>		<b>39</b>	<b>4.2</b>			
<b>Open Space</b>	Golf Course	179				
	Neighborhood Parks	<sup>5</sup>				
	Lowlands Open Space	440				
	Environmental Interp. Center	2				To be located within Lowlands
	Uplands Open Space	83				
	Subtotal for Open Space	704	76.8			
<b>GRAND TOTAL<sup>6</sup></b>		<b>918</b>	<b>100</b>			

<sup>5</sup> Neighborhood parks are expected to total 2.5 acres and are included in the Residential Area acreage.

<sup>6</sup> Grand total is the sum of those items shown in bold.





**Open Space.** A total of 706.5 acres of open space (77% of the site) would be provided as part of the project. This open space would include the following elements: 1) golf course (179 acres); 2) neighborhood parks (2.5 acres); 3) uplands open space in and around the resort, wine center and winery and residential areas (83 acres which would partly be used for vineyards); 4) a small environmental interpretive center (2 acres) and 5) lowlands open space (440 acres). The extensive lowlands acreage lies within the floodplain and along the Napa River. Grazing, which now occurs in this area, would be removed as part of the project.

**Other Project Components.** The project proposes to construct two separated public pedestrian/bicycle trails: A Bay Trail paralleling Stanly Lane to Old Soscol Road and then paralleling Old Soscol Road to a junction with Cuttings Wharf Road; and a river trail paralleling Stanly Lane south of the Old Soscol Road to the river. In addition, the project proposes to dedicate a river trail easement to the city. Planned off-site circulation improvements include a stoplight at Stanly Lane and SR 12/121, and potential widening of portions of 12/121 and 29/12. A city fire station may be constructed onsite, or alternatively, at a city-owned property immediately north of the site. The preferred wastewater treatment provider for the project is the Napa Sanitation District. The second choice would be for the project to operate an onsite wastewater treatment/reclamation facility to process wastewater generated onsite for land application on the golf course and other landscaped areas within the project.

**Phasing.** The proposed project would be developed in several phases over a period of 10 years or less. The initial phase will include the improvement of Stanly Lane and Old Soscol Road; grading for and construction of the wine center and winery, the golf course and resort, except for a portion of the resort homes; and simultaneous development of one or more residential neighborhoods. Later phases will include the construction of the remaining residential neighborhoods and resort homes.

9. **Surrounding Land Uses and Setting:** The project site is entirely within the City of Napa's Rural Urban Limit (RUL) line. The City of Napa is located in Napa County (as shown in Figure 1, Project Vicinity), in the northern part of the San Francisco Bay Area. With a population of approximately 66,900 people, the City of Napa is the largest city in Napa County and also serves as the County seat.

The Napa River forms the southern boundary and much of the eastern boundary of the project site (as shown in Figure 2, Illustrative Site Plan). Adjacent uses across the river include agriculture, the Napa Valley Corporate Park, and the Napa Sanitation District wastewater treatment facility. The project site is bordered by State Route (SR) 12/121 on the north, and agricultural vineyards on the west and southwest. SR29/12 bisects the property and is a regional roadway for visitors entering the City of Napa and Napa Valley

10. **Other agencies whose approval is required (e.g., permits, financing approval, or participation agreement.)**

The City of Napa is the Lead Agency for this project. Approval of the proposed project by the City of Napa would require a General Plan Amendment, adoption of the Specific Plan, rezoning and will include a Development Agreement. Subsequent approvals are expected to include, without limitation: tentative and final subdivision maps, parcel maps, improvement plans and subdivision agreements; site development plan review and final architectural review approvals for the resort, golf course and commercial buildings; possible use permits; demolition permits for existing buildings, grading and building permits; and possible local benefit districts and/or public financing districts.

Other agencies which have discretionary authority to undertake or approve all or some portion of the project and thus are considered to be Responsible Agencies under CEQA include, without limitation:

Napa Local Agency Formation Commission

- Approval of revised sphere of Influence and annexation to the Napa Sanitation District (NSD)
- Alternatively, if wastewater treatment capacity is unavailable from NSD, approval of formation of a community services district or similar special district to operate an onsite wastewater treatment/reclamation facility, unless the City were to agree to operate such a facility.

*Note: The City of Napa's Sphere of Influence should technically be adjusted by LAFCO to include Stanly Ranch after action on the project, but since no city boundary change is sought, there would be no requirement for the City to request LAFCO revision of the City Sphere.*

Napa Sanitation District

- Approval of annexation and permit to provide sewer service (in the principal wastewater treatment alternative)

Napa County

- Encroachment permit for emergency access/Bay Trail connection to Cuttings Wharf Road

State Department of Fish and Game

- Streambed Alteration Permit

State Department of Transportation

- Approval of plans and encroachment permit for a stoplight at Stanly Lane and any other highway modifications

State Regional Water Quality Control Board

- National Pollutant Discharge Elimination System (NPDES) permit for stormwater discharge.
- Water Quality certificate for Section 404 permits
- Waste Discharge Requirements Permit to operate an onsite wastewater treatment/reclamation facility (in the onsite wastewater treatment/reclamation alternative)

U.S. Army Corps of Engineers

- Section 404 permit for less than three acres of wetland fill
- Section 10 permit for sewer pipeline under Napa River

Trustee Agencies, identified as state agencies having legal jurisdiction over natural resources affected by a project which are held in trust for the people of the State of California include:

State Department of Fish and Game

- With regard to the fish and wildlife of the state, to designated rare or endangered native plants, to game refuges, ecological reserves, and other areas administered by the department.

State Lands Commission

- With regard to state-owned "sovereign" lands such as beds of navigable waterways.



**Environmental Factors Potentially Affected:**

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

- |  |  |   |
|--|--|---|
| <input checked="" type="checkbox"/> Land Use and Planning  | <input checked="" type="checkbox"/> Transportation/Circulation         | <input checked="" type="checkbox"/> Public Services               |
| <input checked="" type="checkbox"/> Population and Housing | <input checked="" type="checkbox"/> Biological Resources               | <input checked="" type="checkbox"/> Utilities and Service Systems |
| <input checked="" type="checkbox"/> Geological Problems    | <input checked="" type="checkbox"/> Energy and Mineral Resources       | <input checked="" type="checkbox"/> Aesthetics                    |
| <input checked="" type="checkbox"/> Water                  | <input checked="" type="checkbox"/> Hazards                            | <input checked="" type="checkbox"/> Cultural Resources            |
| <input checked="" type="checkbox"/> Air Quality            | <input checked="" type="checkbox"/> Noise                              | <input checked="" type="checkbox"/> Recreation                    |
|  | <input checked="" type="checkbox"/> Mandatory Findings of Significance |   |

**Determination.**

(To be completed by the Lead Agency.)

On the basis of this initial evaluation:

I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.



\_\_\_\_\_  
Jean Hasser, Assoc. Planner

\_\_\_\_\_  
Date

For: John Yost, Planning Director

**Evaluation of Environmental Impacts:**

Reference documents for the information below are identified by number at the end of each question and listed in Exhibit B.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>I. LAND USE AND PLANNING.</b> Would the proposal:				
a) Conflict with general plan designation or zoning?		X		
b) Conflict with applicable environmental plans or policies adopted by agencies with jurisdiction over the project?		X		
c) Be incompatible with existing land use in the vicinity?		X		
d) Affect agricultural resources or operations (e.g., impacts to soils or farmlands, or impacts from incompatible land uses)?		X		
e) Disrupt or divide the physical arrangement of an established community (including a low-income or minority community)?				X

a) and b) The EIR will address proposed General Plan land use designations required as part of the project, as well as compatibility with applicable policies of the adopted and draft City General Plans, the Napa County General Plan and Airport Land Use Compatibility Plan, and the Napa Congestion Management Program. Existing and proposed zoning will also be addressed. c) and d) Other issues to be analyzed include compatibility with adjacent land uses and impacts on agricultural resources. Portions of the site are currently used for grazing and agricultural production (grapes). Agricultural uses abut much of the project site. The Rural Urban Limit (RUL) line edges the site. Policies regarding residential area "feathering" i.e., density reductions, and agricultural setbacks apply. [Exhibit B reference documents 2, 3, 4, 6, 8, 11, 12]

Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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**II. POPULATION AND HOUSING.** Would the proposal:

- |  |  |   |   |
|--|--|---|---|
| a) Cumulatively exceed official regional or local population projections?  |  |   | X |
| b) Induce substantial growth in an area either directly or indirectly (e.g. through projects in an undeveloped area or extension of major infrastructure)? |  | X |   |
| c) Displace existing housing, especially affordable housing?   |  |   | X |

a) The project is not expected to exceed official regional or local population projections, as the draft General Plan assumed resort, tourist commercial and up to 600 units for this site, and ABAG regional projections are largely based on the City's projections. b) The amount of growth expected to result from implementation of the Specific Plan will be examined in the EIR. The project is expected to result in up to 450 jobs, up to 1,515 residents assuming the citywide 2.55 persons per household figure used in the draft General Plan, and up to 655 guests, if all units were fully occupied. c) Existing employee housing within the project site consists of 4 units in two detached residences and a bunk house/office-residence, which are proposed to be removed. Up to 54 employee rental units are proposed as part of the Specific Plan. The need for and availability of affordable housing and employee housing will be assessed in the EIR in the context of City policies and regulations. [Exhibit B reference documents 1, 3, 4, 5, 6, 10, 13]



	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>III. GEOLOGIC PROBLEMS.</b> Would the proposal result in or expose people to potential impacts involving:				
a) Fault rupture?		X		
b) Seismic ground shaking?		X		
c) Seismic ground failure, including liquefaction?		X		
d) Seiche, tsunami, or volcanic hazard?			X	
e) Landslides or mudflows?			X	
f) Erosion, changes in topography or unstable soil conditions from excavation, grading, or fill?		X		
g) Subsidence of the land?			X	
h) Expansive soils?		X		
i) Unique geologic or physical features?				X

a) Traces of the West Napa fault zone traverse the project site. Although evidence of recent fault displacement has not been identified at the project site, the potential for fault rupture will be addressed in the EIR. b) The project site is located in an area of active seismicity with numerous potential sources of moderate to large earthquakes. c) Due to the presence of saturated unconsolidated deposits, the potential for liquefaction (and associated seismic spreading or settlement) presents potential hazard to foundation stability in some portions of the site. d) Seiche, tsunamis, or volcanic hazards are not expected to pose significant hazards due to the site's upriver location and lowland open space preservation. e) The EIR will address slope failure. f), g), h) The young sediments found in the floodplain on the site may include deposits susceptible to consolidation or compression. Site levees show evidence of erosion. A preliminary grading plan will be reviewed and erosion potential within the development area and along the levee will be addressed in the EIR. The levees along the Napa River are apparently constructed of onsite silty clays. The structural integrity of these levees and impacts on proposed development will be addressed in the EIR. i) No unique geologic features have been identified on the site. [Exhibit B reference documents 1, 3, 4, 5, 7]

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>V. WATER.</b> Would the proposal result in:				
a) Changes in absorption rates, drainage patterns, or the rate and amount of surface runoff?		X		
b) Exposure of people or property to water related hazards such as flooding?		X		
c) Discharge into surface waters or other alteration of surface water quality (e.g. temperature, dissolved oxygen or turbidity)?		X		
d) Changes in the amount of surface water in any water body?		X		
e) Changes in currents, or the course or direction of water movements?			X	
f) Change in the quantity of ground waters, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations, or through substantial loss of groundwater recharge capability?			X	
g) Altered direction or rate of flow of groundwater?			X	
h) Impacts to groundwater quality?		X		
i) Substantial reduction in the amount of groundwater otherwise available for public water supplies?			X	

a), d), and e) Construction of impervious surfaces at the project site would increase the volume and may increase the rate of runoff, which will be addressed in the EIR. b) The portion of the Napa River adjacent to the project site is characterized by a wide, tidal influenced channel. Although a levee has been constructed along much of the west bank of the Napa River, the easternmost portion of the site is within the floodway, and a larger area along the eastern and southern portions of the site are within the 100-year flood hazard zone for the Napa River. The Specific Plan shows that development is not proposed in the floodway, or most parts of the floodplain. Flood hazards will be addressed in the EIR. c) Improperly treated storm water discharge could impact surface water quality. The proposed development of the project site could also result in degradation of water quality, due to construction runoff and chemicals used in conjunction with the golf course. f), g), h), and i) Water for the project would be derived from the City's water supply rather than from onsite groundwater wells. Consequently, the proposed project would not change the quantity or rate or flow of groundwater. However, any potential impacts to groundwater quality will be addressed in the EIR. The hydrological section of the EIR will examine how these issues have been addressed in the Specific Plan. [Exhibit B reference documents 1, 3, 4, 5, 7]

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
V. <b>AIR QUALITY.</b> Would the proposal:				
a) Violate any air quality standard or contribute to an existing or projected air quality violation?		X		
b) Expose sensitive receptors to pollutants?		X		
c) Alter air movement, moisture, or temperature, or cause any change in climate?			X	
d) Create objectionable odors?		X		

a) and b) The EIR will address any effects the proposed project might have regarding air emissions and sensitive receptors. The proposed project would generate air pollutants through the vehicle traffic generated by the new uses which could affect both local and regional air quality. During construction, equipment emissions and fugitive dust could be generated. Local effects would be primarily an increase in carbon monoxide along roads and at intersections providing access to the site. Regional effects would include an increase in the total emission burden within the air basin. The air quality analysis will address these impacts using methods and assumptions acceptable to the Bay Area Air Quality Management District. c) The EIR will also address if the project would cause changes in climate. d) The proposed project could involve some application of pesticides in the vineyards, and sewage treatment alternatives could also potentially create objectionable odors. These issues will be addressed in the EIR. [Exhibit B reference documents 1, 3, 4, 5, 7]



	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>VI. TRANSPORTATION/CIRCULATION.</b> Would the proposal result in:				
a) Increased vehicle trips or traffic congestion?		X		
b) Hazards to safety from design features (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?		X		
c) Inadequate emergency access or access to nearby uses?		X		
d) Insufficient parking capacity on-site or off-site?		X		
e) Hazards or barriers for pedestrians or bicyclists?		X		
f) Conflicts with adopted policies supporting alternative transportation (e.g., bus turnouts, bicycle racks)?		X		
g) Rail, waterborne or air traffic impacts?				X

In general, this EIR will examine the following: regional highway network and local streets, emergency access for the proposed project, and pedestrian, bicycle and transit facilities. Onsite circulation plans will be evaluated for road width, parking and overall efficiency and safety. The project site is located adjacent to two major regional roadways: SR 12/121 and SR 29/12. Access to the site is via Stanly Lane at its junction with 12/121. Stanly Lane is proposed to be widened and improved as part of the proposed project and remain a public street to at least the panhandle area. The other main street, Old Soscol Road, and residential and resort streets and lanes are proposed to be private.

a) The potential effects of increased vehicle trips and proposed mitigations will be addressed in the EIR. b) Proposed street design and offsite circulation improvements will be assessed in terms of safety in the EIR. c) Emergency access to the site is proposed via Stanly Lane and a second access to Cuttings Wharf Road. The proposed project also includes a network of emergency vehicle accessways between residential neighborhoods and through the resort. The adequacy of this system will be evaluated in the EIR. d) Proposed parking for the resort is consolidated at the golf course clubhouse and resort lodge, and at an employee parking lot. Residential parking is onsite with additional designated on street guest parking. Parking will be evaluated for adequacy in the EIR. e) The project would construct two public trails: a Bay Trail connection paralleling Stanly Lane to Old Soscol Road and then paralleling Old Soscol Road to a junction with Cuttings Wharf Road; and a river trail paralleling Stanly Lane south of Old Soscol Road to the river. In addition, the project describes dedication of a river trail easement to the City. A system of private pedestrian and bicycle paths are also proposed through the resort and to connect the residential neighborhoods to the golf club house and open space areas. A stop light at Stanly Lane would permit pedestrian/bicycle access across SR 12/121. Adequacy of and any hazards or barriers to the proposed private and public pedestrian/bicycle network and alternative public trails will be evaluated in the EIR. f) Onsite shuttle service for employees is proposed between the main employee parking lot and resort destinations. Guest shuttle service is planned between the resort and offsite destinations. Golf carts would be used to transport guests from the lodge to their units and may also be used onsite by residents. The EIR will evaluate the project's coordination with city and other public transit carriers and incorporate any mitigation measures. g) The proposed project will not result in any rail, waterborne or air traffic impacts. [Exhibit B reference documents 1, 3, 4, 5, 7, 9]

Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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**VII. BIOLOGICAL RESOURCES.** Would the proposal result in impacts to:

a) Endangered, threatened, or rare species or their habitats (including but not limited to plants, fish, insects, animals, and birds)?	X		
b) Locally designated species (e.g., heritage trees)?			X
c) Locally designated natural communities (e.g., oak forest, coastal habitat, etc.)?			X
d) Wetland habitat (e.g., marsh, riparian, and vernal pool)?	X		
e) Wildlife dispersal or migration corridors?	X		

Due to grazing and agricultural practices, the environmental qualities of the site have been altered over time, and some habitat value has been diminished. The biological section of the EIR will verify existing biological resources and wetland areas onsite, assess project impacts, and propose mitigation measures. a) The biological resources of the Stanly Ranch project site includes several special status plant and wildlife species and their habitats which will be addressed in the EIR. These habitats, which include tidal and seasonal wetlands, are found primarily on the lowland or levee portions of the site where no development is proposed. Riparian areas also provide habitats of special interest. The site's eucalyptus windrows will be reviewed for their biological habitat resource value, and as a notable visual resource under aesthetics. b) No locally designated biologic species, such as designated heritage trees, are found onsite. c) The City of Napa has no locally designated natural communities, such as oak forest. d) Tidal and seasonal wetlands are found primarily on the lowland portions of the site, proposed to remain open and undeveloped. Several creeks and drainageways also traverse the site. The EIR will address project impacts on these resources. e) The EIR will address wildlife dispersal and migration corridors that may occur onsite. [Exhibit B reference documents 1, 3, 4, 5, 7, 9]

Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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**VIII. ENERGY AND MINERAL RESOURCES.** Would the proposal:

a) Conflict with adopted energy conservation plans?		X	
b) Use non-renewable resources in a wasteful and inefficient manner?		X	
c) Result in the loss of availability of a known mineral resource that would be of future value to the region and the residents of the State?			X

a) The proposed project is not anticipated to conflict with adopted energy conservation plans. However, the EIR will address the potential for energy conservation. b) Both renewable and non-renewable resources will be expended during construction of project infrastructure and project facilities. The EIR will describe general energy demand for the project for onsite facilities and the potential for energy conservation and recycling. c) There are no known mineral resources on the project site. [Exhibit B reference documents 1, 5, 7, 17]

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>IX. HAZARDS.</b> Would the proposal involve:				
a) A risk of accidental explosion or release of hazardous substances (including, but not limited to: oil, pesticides, chemicals, or radiation)?		X		
b) Possible interference with an emergency response plan or emergency evacuation plan?		X		
c) The creation of any health hazard or potential health hazard?		X		
d) Exposure of people to existing sources of potential health hazards?		X		
e) Increased fire hazard in areas with flammable brush, grass, or trees?		X		

a) Potential public health and safety issues at the Stanly Ranch project site are partly related to the past and current land uses which may have included the use storage and disposal of hazardous materials. The dominant use of the site has been agricultural production, which presents the possibility that soil or water quality in portions of the site may be degraded through the use of agricultural chemicals. An environmental site assessment completed in 1995 found no evidence of contaminated soil or groundwater. That assessment did point out the potential that some building materials and equipment may contain hazardous materials such as lead or asbestos. It noted that two underground storage tanks were removed from the site in 1989, and after investigation was completed, owners obtained a clearance letter from Napa County Department of Environmental Management that no additional action is required. The EIR will review and assess studies performed to date, and conduct additional study to assure health and safety impacts are not significant. b) Existing and proposed emergency access and emergency response plans will be addressed in the EIR under transportation and public services. c) The proposed project will utilize some pesticides for viticulture and at the golf course and landscaped areas which could expose people to potentially harmful chemicals. Onsite wastewater treatment plants have the potential to use harmful chemicals such as chlorine gas; however, such chemical use is specifically not proposed. Household hazardous wastes can be anticipated as elsewhere throughout the city. d) Electromagnetic fields (EMF's) associated with the existing high-voltage electrical transmission lines at the project site present a possible health risk. Napa Sanitation District staff report that the existing wastewater treatment facility across the Napa River no longer uses or stores any chemicals onsite which could pose a hazard to future residents; odors are the only possible concern until plant upgrades are completed. This chapter of the EIR will address impacts and mitigation for the above issues. e) Fire hazards will be addressed in the public services chapter of the EIR. [Exhibit B reference documents 1, 3, 4, 7, 17, 18]



	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>X. NOISE.</b> Would the proposal result in:				
a) Increases in existing noise levels?		X		
b) Exposure of people to severe noise levels?		X		
<p>a) and b) The noise section of the EIR will determine the effects of temporary and permanent project related noise level increases on any nearby sensitive receptors, as well as effects of existing highway and airport noise sources on the project itself. If necessary, appropriate mitigation measures will be developed. The site is relatively isolated from the remainder of the developed portions of the City of Napa: only two homes are located adjacent to the site. This reduces the potential for the project to result in significant noise impacts on existing sensitive area receptors. However, the project could result in the exposure of people to noise levels greater than "normally acceptable" as defined by the Napa General Plan. Building sites located closer than approximately 1,500 feet to SR 29/12 may be exposed to noise levels greater than a Community Noise Equivalent Level (CNEL) of 60 decibels. Most of the proposed residential and resort development is located outside this area. However, some units, including employee housing, are proposed within the setback. The project may result in potentially significant impacts to these units unless mitigation is incorporated. A second source of potential noise exposure is from the Napa County Airport, located within a mile of the project to the southeast. The project development area is well outside the airport's CNEL 55dB noise contour. Residential and other sensitive uses are considered "normally acceptable" in such areas, although noise interference with outdoor activities may occur. Conventional construction will eliminate most noise intrusions upon indoor activities. [Exhibit B reference documents 1, 3, 4, 7, 8]</p>				

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>XI. PUBLIC SERVICES.</b> Would the proposal have an effect upon, or result in a need for new or altered government services in any of the following areas:				
a) Fire protection?		X		
b) Police protection?		X		
c) Schools?		X		
d) Maintenance of public facilities, including roads?		X		
e) Other governmental services?		X		
<p>a) b) c) Completion of the proposed project would result in incremental increases in the need for fire protection and emergency medical services, police and schools. The project is expected to require a new fire station just north of the project boundaries or at an onsite location due to the distance to other fire facilities. Increased fire hazards due to added human activity onsite would be reduced through project design and the fire station. d) Maintenance of new public facilities will be reduced, as most onsite facilities are proposed to be private, but are expected to include, at a minimum, portions of Stanly Lane, a fire station and public trails. e) Construction of the project would lead to temporary increases in the need for building inspection and similar governmental services. Appropriate mitigation measures will be recommended for all impacts that may be significant. [Exhibit B reference documents 1, 3, 4, 7, 9, 15]</p>				

Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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**XII. UTILITIES AND SERVICE SYSTEMS.** Would the proposal result in a need for new systems or supplies, or substantial alterations to the following utilities:

- |  |   |  |   |
|--|---|--|---|
| a) Power or natural gas?   |   |  | X |
| b) Communications systems?                                       | X |  |   |
| c) Local or regional water treatment or distribution facilities? | X |  |   |
| d) Sewer or septic tanks?  | X |  |   |
| e) Storm water drainage?   | X |  |   |
| f) Solid waste disposal?   | X |  |   |
| g) Local or regional water supplies?                             | X |  |   |

a) Impacts to gas and electric services and the potential for energy conservation will be evaluated in the EIR. b), c), d), e), f) Implementation of the Specific Plan would require the expansion and construction of utility infrastructure to provide services to the proposed development. These services would include telecommunications, storm drainage management; solid waste disposal; and sewage or wastewater treatment. The plan proposes two options for sewage treatment and reclaimed water use. They include as the principal option, a pump station and pipes for wastewater treatment and reclaimed water supply, that would access Napa Sanitation District (NSD) facilities across the river. Expanded use of reclaimed water is an NSD goal. Stanly Ranch is a potential receiver site. If wastewater treatment capacity is unavailable from NSD, an onsite wastewater treatment/reclamation facility is proposed as an alternative. The plan presents programs and policies for stormwater drainage which will be addressed in the EIR. c) g) The City of Napa currently has sufficient water supplies during normal and wet years as noted in its Water System Optimization and Master Plan (WSOMP) and has increasing water entitlements from the State Water Project. The EIR will examine measures being undertaken to provide adequate citywide water supplies during both drought and normal rainfall years, and project water conservation measures. The WSOMP included projected land use assumptions for Stanly Ranch. [Exhibit B reference documents 1, 3, 4, 7, 9, 14, 16]

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>XIII. AESTHETICS.</b> Would the proposal:				
a) Affect a scenic vista or scenic highway?		X		
b) Have a demonstrable negative aesthetic effect?		X		
c) Create light or glare?			X	

a) and b) The project site forms an important visual gateway to the City of Napa, and is visible from heavily traveled routes at the edge of the City. Existing eucalyptus windrows screen much of the site and are a dominant landscape feature. The Specific Plan proposes to preserve and maintain the screening windrows to the greatest extent possible, and locate the resort and residential areas behind the windrow screens. Project impacts on important views of the site will be described, largely based on visual simulations constructed from five different viewpoints. The project's relationship to design guidelines in the Specific Plan and General Plan policies, and impacts from needed tree maintenance and removal activities will also be evaluated. c) The project would be a source of new light in an area which is currently unlighted; these impacts will also be described. The Specific Plan design guidelines propose "understated" lighting. [Exhibit B reference documents 1, 3, 4, 7, 9]



Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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**XIV. CULTURAL RESOURCES.** Would the proposal:

- |  |   |  |   |
|--|---|--|---|
| a) Disturb paleontological resources?  |   |  | X |
| b) Disturb archaeological resources?   | X |  |   |
| c) Affect historical resources?  | X |  |   |
| d) Have the potential to cause a physical change which would affect unique ethnic cultural values? | X |  |   |
| e) Restrict existing religious or sacred uses within the potential impact area?                    |   |  | X |

a) and b) No evidence of prehistoric use or occupation inside the project area has been detected in two prior field surveys. Based on historic archival review, the EIR will analyze the potential locations of historic archeological resources, such as basements or Old Soscol Landing. c) There are several structures clustered at the central portion of the property at the end of Stanly Lane. These include 4 residential units in 2 detached structures; a bunk house and an office/residence; 4 barns; 3 sheds; and 4 metal silos, none of which are listed on Federal, state or local inventories, but which have potential historic resource value. The site also contains other features with potential historic resource value, such as 3 sandstone bridges and a water cistern. The cultural and historical analysis for this project will evaluate existing onsite structures and certain landscape features under criteria of the California Register of Historical Resources. Effects of the proposed project on potential historic resources will be addressed in the EIR. d) Although no unique ethnic cultural values have been identified onsite, the EIR will recommend measures to assure that should any such resources be uncovered, there is in-field evaluation and potential mitigation. e) No existing religious or sacred uses are occurring within the potential impact area [Exhibit B reference documents 1, 3, 4, 7, 9]

Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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**XV. RECREATION.** Would the proposal:

- |   |   |   |  |
|---|---|---|--|
| a) Increase the demand for neighborhood or regional parks or other recreational facilities? | X |   |  |
| b) Affect existing recreational opportunities?  |   | X |  |

a) The EIR will address city standards for recreation facilities and how the project does or does not meet those standards. The Recreation Element establishes citywide and regional trails through the site; the EIR will address impacts of proposed pedestrian/bicycle trails and alternatives. b) No recreation uses are currently available on the site, which is presently under private ownership. The proposed project would increase public recreational opportunities; these impacts will be examined. [Exhibit B reference documents 1, 3, 4, 5, 7, 9]

Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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#### XVI. MANDATORY FINDINGS OF SIGNIFICANCE.

- |    |  |   |   |
|----|--|---|---|
| a) | Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory? | X |   |
| b) | Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals?  | X |   |
| c) | Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)  | X |   |
| d) | Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?   |   | X |

a) The biological resources of the Stanly Ranch development project site include a number of special status habitats and plant and wildlife species. The EIR will evaluate the potential effects of the project regarding these issues. The EIR will also address impacts regarding historical and archaeological resources. b) The EIR will include an evaluation of the project's potential to achieve short-term, to the disadvantage of long-term, environmental goals. c) The EIR will address cumulative impacts for each topical assessment area. The EIR will determine the significance of potential cumulative impacts and identify mitigation measures as needed. The emphasis of the cumulative impact analysis will be upon those impacts identified in the 1996 EIR on the City's Draft Policy Document of the General Plan which addresses growth to the year 2020. d) The project is not anticipated to have environmental effects which would cause substantial adverse effects on human beings, either directly or indirectly.

**Exhibit B**  
**RESOURCES FOR INITIAL STUDY CHECKLIST**

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1. Stanly Ranch Specific Plan (Draft) and Technical Appendices, EDAW, Inc., May 1997.
2. City of Napa Zoning Ordinance, 1992, City of Napa, Napa, California, updated 1997.
3. City of Napa General Plan, 1986 Update, City of Napa, Napa, California.
4. City of Napa General Plan, Envision Napa 2020, Draft Policy Document, City of Napa, Napa, California, October 1, 1996.
5. City of Napa General Plan, Envision Napa 2020, Background Report, City of Napa, Napa, California, September 30, 1996.
6. Site Visit, Stanly Ranch, June 5, 1997.
7. General knowledge of EIR Consultants.
8. Airport Land Use Compatibility Plan, Napa County Airport Land Use Commission, Hodges and Shutt, adopted April 22, 1991.
9. Scope of Work for Stanly Ranch Specific Plan EIR, Brady/LSA, June 1997.
10. Personal Communication with Tom Kambe, Stanly Ranch Project Manager, June 23, 1997.
11. County of Napa General Plan, amended July 1992.
12. Napa County Congestion Management Program, Napa County Congestion Management Agency, 1995.
13. Projections '96, ABAG, December 1995.
14. Water Supply Optimization and Master Plan, West Yost Associates for City of Napa, August 1995.





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**Appendix B**  
**SUMMARY OF SCOPING MEETING COMMENTS,**  
**COMMENT LETTERS AND RESPONSES TO NOP**

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**SUMMARY OF  
LETTERS AND COMMENTS RECEIVED IN RESPONSE TO NOP AND  
SCOPING MEETING**

■ ■ ■

1. Summary of 9/17/97 Public Scoping Meeting Comments, Napa Planning Department.
2. G. Furth, Napa. 9/11/97. Letter to the editor of the Napa Register. Questions posed about water, sewer, drainage and traffic.
3. Harold Kelly, Napa. 9/8/97. Letter regarding Land Use and Public Policy, Alternatives, Circulation, Noise, Visual and Air Quality, Public Revenues, Hydrology, Drainage and Water Quality, and Growth Inducement.
4. Napa River Reclamation District (Edgerly Island area). 9/16/97. Resolution opposing Stanly Ranch proposal due to flood runoff concerns.
5. David Graves, Saintsbury Winery, Napa. 9/17/97. Letter recommending prohibition of well use by project.
6. Ginny Simms, Napa. 9/17/97. EIR Scoping Remarks re: CEQA checklist, Land Use and Public Policy, Circulation, Hydrology, Visual Quality, Air Quality and Growth Inducement.
7. Thomas Davis. 9/17/97. EIR Scoping remarks regarding Land Use and Planning, Circulation, and Aesthetics.
8. Chris Malan, Napa. 9/17/97. EIR Scoping remarks regarding Land Use, Housing and Infrastructure, Loss of Agricultural Land, Flooding, General Plan alternative concepts, Geology, water, Biological Resources, Growth Inducement.
9. David Briggs, Napa County Sierra Club, Napa. 9/17/97. Letter opposing the project and addressing concerns about Land Use and Planning, Housing, Geology, Water, Air Quality, Circulation, Biological Resources, Hazards, Noise, Public Services, Utilities, Aesthetics and Recreation.
10. James O' Loughlin, Napa. 9/17/97. Letter re: Notices, Geology, Water, Circulation, Energy, Aesthetics, Cultural Resources and Noise.
11. Richard Niemann, Napa. 9/17/97. Letter addressing Land Use and Planning, Growth Inducement, Housing, Geology, Water, Hydrology,

- Drainage and Water Quality, Circulation, Biological Resources and Aesthetics.
12. U. S. Fish and Wildlife Service, Sacramento. 9/23/97. Letter addressing sensitive species.
  13. Jane Smith, Napa. 9/18/97. Letter to Mayor requesting that the No Project and Agricultural Alternatives be mapped with a site plan similar to the other Alternatives, and that they be given full scale equal consideration.
  14. Chris Malan. 9/18/97. Letter to Mayor about General Plan Alternatives and concerns about growth inducement and flooding.
  15. Sarah and John Stevens, Napa. 9/25/97. Concerns about sprawl, jobs/housing and a viewpoint.
  16. PG&E, Brad Harris, Santa Rosa. 9/10/97. Letter addressing PG&E utility issues.
  17. California Native Plant Society, Jake Rugyt, Napa. 9/17/97. Letter addressing impacts of project (and Agricultural Alternative) on wetland vegetation, loss of uplands, and possibilities for marsh restoration.
  18. Napa County Conservation, Development and Planning Department, Michael Miller. 9/26/97. Letter relating concerns about Land Use, Circulation, Visual Quality, Trails, Growth Inducement, Alternatives, and Cumulative Impacts.
  19. Napa Sanitation District, Todd Herrick. 10/1/97. Letter addressing Napa Sanitation District service issues.
  20. Flood Control and Water Conservation District, Napa. 10/1/97. Letter addressing water availability.
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## September 17, 1997 Public Scoping Meeting Summary of Meeting Comments

*(Note: numbers/letters refer to the Notice of Preparation sections.)*

### Richard Niemann

*I (d)* Impacts of the project on agriculture should be considered potentially significant without mitigation since there will be a net loss of agricultural land.

*I (e)* The Carneros area is a unique and diverse existing neighborhood; project impacts should evaluate land use impacts on this area which is much larger than the 1/2 mile environs proposed to be evaluated. Land use impacts on this area should be considered "potentially significant".

*II b)* This project will induce both sprawl and infill development, impacts which should be considered significant and unmitigatable.

*II c)* Employee housing units (54) are inadequate; additional employee housing should be required.

*III i)* Levees and the eucalyptus windrows should be considered unique physical features, and project impacts on these features should be considered to be "potentially significant unless mitigated."

Levees are constructed of alluvial sediments and have not been fully evaluated.

*IV a)* All hard surfaces (pavement, parking sq. footage pavement, roofs...) should be measured to calculate runoff. Impacts cannot be fully mitigated.

*IV c, h)* All hard surfaces should be measured to calculate surface and groundwater quality impacts. Impacts cannot be fully mitigated. NOP should read that project *will* result in degradation of water quality; urban runoff with contaminants *will* enter streams and the golf course *will* present a significant source of fertilizers, pesticides.

*VI a, e)* EIR should examine whether Stanly Lane widening require tree removal and whether roads past the panhandle will be gated and thus create congestion and uneven traffic flow?

*VII d)* EIR should evaluate whether residential, resort, commercial and winery developments (as well as golf course operation) will result in adverse impacts to any wetlands as a result of urban runoff with contaminants.

*XIII a, b)* Need more detail on tree row preservation and replacement plans.

### Jim O'Loughlin

#### *Impacts of project*

Believes that the project will have several significant unmitigatable effects as defined in CEQA guidelines including *converting prime agricultural land to non-agricultural land use, or impairing its agricultural productivity; conflicting with adopted community environmental plans and goals; having a substantial negative aesthetic effect; substantially degrading /depleting groundwater resources; causing an increase in traffic substantial in relation to existing traffic and the capacity of the street system; encouraging activities which result in the use of large amounts of fuel, water or energy in a wasteful manner.*

*Notices* States NOP and Draft EIR must be sent to State Air Resources Board (*sent*), BAAQMD (*sent*)



University of Calif if this site is part of their Natural Land and Water Reserve System (*it is not*)  
State Lands Commission (*sent*) Fish and Game (*sent*)

### *III Geology.*

Recommends trenching to investigate linear surface breaks due to the West Napa Fault Zone shown on USGS maps.

Recommends including the Dept. of Conservation, Division of Mines and Geology in the investigation so they can make determination about extending the Alquist-Priolo Special Study Zone north through the site.

Items a, b, c, g, h should be considered “potentially significant impacts” based on USGS, etc. data.

### *V. Water.*

Items a, b, c, f, h, and i should be considered “potentially significant impacts”

### *VI. Transportation*

Items a, b, c & g should be considered “potentially significant impacts.”

Recommends that the potential effects of increased vehicle trips on air quality and noise be modeled by computer simulations including saving the eucalyptus windrows.

Recommends relocating the proposed entrance road to the east of the windrows, and placing the bicycle trail within the existing windrows to save the trees.

States project will substantially increase the ambient noise for adjoining areas.

Recommends that the traffic analysis address all alternatives including the agriculture/winery alternative.

### *Alternative*

Recommends the agricultural alternative include a winery.

### *Traffic*

The traffic analysis should be expanded to address impacts and mitigations for Golden Gate Drive/Stanly and Golden Gate/Foster

Traffic analysis should also include AM and noontime weekday peak period counts.

Recommends using Caltrans trip generation models (i.e., 10 adt/unit)

Believes proposed traffic mitigation measures, such as partial grade separations are infeasible because MTC has given higher priority to the Trancas/Redwood/29 interchange, and seismic repairs. States postponement of mitigation measures has not been allowed by the Courts.

### *VIII. Energy and Mineral Resources*

Recommends a and b are potentially significant impacts because unmitigated use of non-renewable energy resources (gas, oil...) will result due to leapfrog sprawl of the project.

### *XIII. Aesthetics.*

Recommends a, b and c are potentially significant impacts.

Believes the view from the highway will have a significant adverse aesthetic effect as it will be the rear of the shopping center and employee housing, because proposed roads will destroy the windrow, and because it's the only southern gateway not now visually impaired by commercial, residential or industrial structures.

Light and glare will create significant negative effects (esp. from shopping center, golf driving range and tennis courts) for viewers from scenic viewpoints such as the Napa River, Skyline Park, the Caltrans vista point.

#### *X. Noise*

Recommends that mitigation measures must reduce noise levels from the highway to an insignificant level at the employee housing area and other impacted areas.

#### *XIV. Cultural Resources*

Believes there may be archaeological resources onsite, as there are archaeological resources in the vicinity (across the river and in the county's airport industrial area)

Recommends that the archaeological studies be reviewed by the Suscol Indian Council and the Sonoma State University Clearinghouse.

Requests professional background information on the City's archaeological consultant.

#### **Judy Irvin**

States the relationship between the General Plan and the Stanly Ranch Specific Plan is "based on nothing so far" as the draft General Plan EIR hasn't been certified and the new General Plan hasn't yet been adopted, and the existing General Plan calls it a "study area"

Because of the above, the Stanly Ranch EIR must evaluate trans-boundary effects of the project, especially traffic.

EIR should evaluate how the Stanly Ranch will affect traffic throughout the city, as on Coombs, etc, not just nearby intersections. The General Plan states traffic will increase to 10,000 vpd on her street, Coombs or 4X its current volumes. Where is the increase coming from? As this is the last large project planned in the south of Napa, it must be the main culprit.

Studies for other General Plans indicate the higher the income for the development, the higher trips/day generated. 11 trips/day should be used for the 540 units.

Where are the hundreds of very low income service workers for the project going to live? They may further increase densities in her older Napa neighborhood as there's no affordable housing anywhere else. Thus it makes sense this project would also increase traffic in her neighborhood and elsewhere in the city. This is an impact on her national register district and it is only one of the trans-boundary effects which must be studied as the General Plan EIR hasn't been certified.

#### **Dave Briggs, Secretary of the Napa County Sierra Club**

Stated the Club strongly opposes the project as proposed as an unnecessary intrusion into a very environmentally sensitive area. The scale of this project shouldn't be considered. The site is the gateway to the City and to the renowned Napa Valley. The EIR should identify what impact the project will have on the character of Napa Valley. The project will cause significant, unmitigatable changes to the character of this important community entry and will impact the character of Napa Valley.

There are significant risks associated with bringing so many people to this site which is hazardous in terms of earthquake hazards, eucalyptus tree hazards and airport safety.

*I d)* All impacts including growth inducing impacts on agriculture in Napa Valley and the surrounding region should be addressed.

As sponsors may be exempt from further environmental review after the specific plan stage, detailed review of all impacts related to housing construction and activities of future inhabitants must be addressed.

## *II. Housing*

Request detailed breakdown of proposed housing types by affordability along with area income need categories

Address the project's impacts on the city's ability to meet goals of the existing Housing Element.

## *III. Geology*

Soil types and soil horizon throughout the ranch should be provided along with a discussion of the suitability of these soils for agricultural use.

The value of different zones for groundwater recharge should be analyzed.

## *V. Water*

Disclose impact on the current city water supply capacity as well as the need for and anticipated method of providing additional water pressure to serve the project.

Disclose impacts that may result from construction and operation of an onsite wastewater treatment/reclamation facility.

## *V. Air Quality*

Need quantified data on criteria air pollutants caused directly by the project and project induced growth.

## *XI. Public Services*

Impacts that urban use of the Stanly Ranch would have on current services should be addressed.

## *XII. Utilities and Service Systems*

Identify all impacts for both potential fire station sites including noise and safety issues related to emergency vehicle travel to and from the project.

Describe impacts to NSD including impacts of a cross river pipeline and quantitative information on wastewater generated and BOD load.

Potential impacts to the river and nearby inhabitants due to sewage pipe rupture (as occurred during flooding of the river above Trancas Street).

## *XIII. Aesthetics*

Views from all highway approaches, from the proposed public trails, and from the river should be presented.

View analysis should demonstrate how the site would look during the phases of tree removal.

Request a visual and written description of the proposed Bay Trail views and environs

Describe impacts that fire station construction at the *Caltrans* site would have on the quantity of recreation land available in the immediate area.

## **Chris Malan**

The Stanly Ranch annexation in 1955 was a mistake. We know today that suburban sprawl such as this outside LAFCO's sphere come at a high price to the taxpayer. LAFCO stated in 1970 that the



infrastructure costs are unworkable. This would be a bedroom community for the bay area with reliance on long commutes and increased air pollution. Stanly Ranch has priceless agricultural land which should never have been annexed. The annexation mistake should be corrected by deannexation. It sets an unacceptable precedent for sprawl in the valley, and will encourage an increase in RUL expansion, infill of housing, and cause a need to expand highway 12/29 interchange. Stanly Ranch places 1,000 homes, etc. next to historic wetlands. The DFG has stated this will create a problem with endangered species in this delicate area.

Request economic analysis to identify costs to the taxpayer.

Additional runoff from this project into the Napa River would cause more flooding. Must calculate total runoff from the proposed project

The Citizens Advisory Committee Concept Report (p. 30) under their organizing principles stated there would be a commitment to preservation of agriculture and the natural environment. On (p. 41) There will be a boundary protecting agricultural and open space lands from urban uses. In Scenario One, gateways to Napa (121 and 29) remain unchanged and land uses retained open space and agriculture for Stanly Ranch. This scenario was not adopted by city staff; the draft General Plan in 1996 showed 900 homes and 109,314 sf of commercial/industrial uses. Current General Plan shows it as a study area.

It is unacceptable to have huge development next to historic wetlands.

*Specific comments on NOP*

*I a)* The proposed land use change is against most all the current general plan goals and policies, thus impacts cannot be mitigated.

*II b)* Should be potentially significant, no mitigation due to encroachment into agricultural lands creating precedent for further abuse of agricultural lands and precedent for housing infill.

Creates a need for substantially more low cost housing than proposed: 450 jobs but only 54 housing units. Proposal doesn't state the 54 units will be affordable.

*III a, b, c)* Stanly Ranch is affected by 3 faults: Rodgers Creek, West Napa and Green Valley. Geotechnical studies should be required by licensed professionals and include conclusions and recommendations for appropriate mitigation.

*IV. a)* There is insufficient mitigation to deal with cumulative runoff; the development will impact flooding in the rest of the Napa City community.

*f)* Developer should definitively state they will not drill wells.

*VII. Biological Resources*

*a)* Recommends it is not possible to mitigate huge development on top of and immediately next to wetlands and uplands.

**Tom Davis**

Recommends that as there is no final general plan for the area, we should wait until there is a general plan in place. Until the general plan is adopted, the land should be treated as if it were zoned in its current use, which is agriculture.

The plan is not compatible with existing agricultural land uses, and as the city is 2.5 miles away, the plan cannot be considered a natural expansion of the city.

Development will effect neighboring agricultural properties from  
changes in drainage patterns  
pollution from vehicles  
increased problems requiring fences, increased security

States much of the property is on the floodplain, and increased drainage will increase flood damage downstream and upstream during high tides.

#### *Circulation*

All traffic concerns will be significant. Increased traffic from the development would substantially burden Highway 29 and require improvements to the 12/29/121 intersection.

Highway 12/121 will need to be widened and traffic lights installed at Stanly Lane.

Traffic will increase on Golden Gate and Foster, and Imola would also need to be improved from Foster to Coombs as a result of the project. The traffic analysis should investigate these impacts, as well as other traffic impacts in the south part of the city.

Also need to look at how this project would affect services (street sweeping, maintenance) of other city streets

#### *Aesthetics.*

The project will be plainly visible from the Highway 12/29 vista point, and an eyesore; this view should be analyzed.

View of rooftops from both highways will have a negative aesthetic effect and should be analyzed. If eucalyptus are cut down, the effect will be even more negative.

#### *Growth Inducing.*

Decision makers need to study the impact this project will have on encouraging development between Stanly Ranch and the city. This area will now be considered infill and will have increased pressure to development (similar to what happened in Browns Valley).

#### **Chris Sawyer**

This project will destroy existing wetlands, and recreate them elsewhere. Wetlands take a thousand years or more to create; they're not something that can be created overnight.

As some of the eucalyptus trees are taken out, look closely at the species of trees which will be put back in their place.

#### **Diane Dillon**

*p. 6, chart* does not show acreages of onsite parking to assist in calculating runoff.

She suggested the following several items be listed in the "potentially significant" column:

*p. 11. I c, d, e)* this should be considered potentially significant because the project would convert an agricultural area to residential, and there are no existing residential uses in the area

*p. 12, II b)* growth inducing: this impact should be potentially significant and not mitigatable.

*p. 13 III i)* Windrows are a unique physical feature and should be categorized as potentially significant.

*p. 14 V f & g)* Project doesn't contain assurances that groundwater will not be used. It states city water will be used; but a proper mitigation may be a legal prohibition against well use.

Letter from Saintsbury requesting prohibition on use of any groundwater as a mitigation measure.

*p. 15, item V a)* There is no known mitigation mitigation for added traffic generated pollutants and this should be examined in the context of the North Bay traffic study.

*p. 16, item VI g.* Training flights take place frequently over the site at 1,000 feet and generate more than 70 db at the ground. She provided a map of the training flight patterns as well as an activity report from the Napa County Airport for the last 12 years.  
She suggests that the CNEL map (p. 19, X b) is in error.

*p. 21 item 13.* Conversion of this gateway parcel is a potentially significant impact. It will forever cause new light and this isn't mitigatable.

*p. 23, item 16.* Impact of extending urban densities 2.5 miles south of Imola Avenue will create an infill situation in the intervening lands.

*Suggested alternative:* Recommends a full analysis of a resort and winery alternative without a golf course and without the restaurant/commercial area at the highway entrance. Any commercial aspects of the project can be situated where hotel would be.

## **Ginny Sims**

### *Land Use*

Describe land uses within 1.5 miles of the site as the adjacent lands are agricultural or the river. The extent to which development will intrude into agriculture and open space should be shown precisely.

Studies on sprawl indicate that this kind of development may have an impact on downtown when you consider where people will do their shopping, they may not make it downtown.

This project shouldn't be analyzed against the Draft General Plan, as it hasn't been adopted.

LAFCO should be included in the policy agencies since it shows that area as outside the city's Sphere of Influence.

### *Circulation*

Caltrans should specifically comment on this plan.

Traffic impacts on Golden Gate Drive should be analyzed, as should the Imola/29 interchange. This will likely be the favored route of residents once a traffic light is installed at Stanly Lane.

Traffic counts should be taken during AM and midday peak as well as PM. This modeling does not include AM or midday, and this information is needed for checking on the validity of the work and for air quality projections.

When evaluating emergency road adequacy, include drawing of Cuttings Wharf emergency exit treatment showing how only emergency vehicles and hikers and cyclists will have access.

### *Hydrology.*

Include cumulative impacts of the increased runoff from areas in and around the Napa Co. Airport when evaluating the stormwater impacts with the flood control project and the Regional Water Quality Control Board.

Mitigation measures should include a stormwater runoff management plan, not just a recommendation.



She provided a Resolution from Napa River Reclamation District re: the impacts on them.

*Visual.*

Views should include view from 12/29/121 looking west/southwest of the backside of the mini mall and the employee housing.

Rendered model should not show new tree plantings as if they are mature. All visuals should show only existing mature trees. Where trees are modeled, they should show before and after renditions.

Should show views from point on southern crossing where rooftops and parking are most visible.

*Noise:*

Noise from the airport should be examined, and there should be noise modeling at the employee housing. This location may be where trucks gain speed as they begin to go up over the bridge.

*Air quality.*

The model should monitor and predict pollutants at the employee housing location specifically.

*Growth inducement.*

Impact of project on area between Imola and the Stanly Ranch should be analyzed as this area becomes infill.

*Alternatives*

There should be a full analysis of the resort only alternative.

City should request a quantitative analysis of all alternatives except the no project alternative.

**Tony Norris**

*Trees*

As a licensed pest control advisor, he's been monitoring the spread of the eucalyptus long horn bore since he discovered it in Vallejo. The chair of the Napa Tree Commission reports it is active in the Carneros area and he believes it may be active in the site's windrows.

If so, this creates significant impacts related to aesthetics and cultural resources and it increases fire hazard and tree limb drop hazards

*Flooding*

He stated the Napa River Reclamation District's (in a unanimous July 1, 1997 resolution) opposes the project unless and until the city and county are satisfied that adequate mitigation measures have been installed to make certain that flood runoff created by the project will not enter the Napa River and cause catastrophic flooding to Edgerly Island and the City of Napa.

The Stanly Ranch will create hundreds of acre feet of water runoff during the storm season which will be drained into the Napa River and mitigation measures do not adequately address such flood influences on the river. The lack of such flood control and mitigation will result in inundation of Edgerly Island and the addition of hundreds of acre feet of water to downtown Napa, creating the possibility of catastrophic flooding in the city center.

It is important that the project not increase the burden on the Army Corps coalition flood control plan.

*Mandatory Findings*

Re Mandatory Findings of Significance it has an adverse effect on human beings, and thus should be considered a significant impact.

### **John Stevens**

#### *Social/housing*

He is concerned about social impacts of this project. 200-250 low income jobs are being proposed but in fact it will impoverish Napa. There will be only 54 employee units. Where will the other 150-200 people live? They'll live in impoverished conditions. This isn't the future we need for Napa.

#### *Loss of Agriculture/traffic*

Napa is known for its agriculture and spaciousness. Some agricultural uses aren't even fenced which is unusual in the U.S. This project will turn an agricultural area into a commercial venture and 894 housing units, 200 of which will be essentially rentals. The traffic impact from these will be much greater than other homes being proposed.

#### *Views*

The viewscape entering Napa will be trees hiding a prison on the east, and eucalyptus hiding a substantial residential area on the west. He's concerned about the loss of open space and agriculture.

### **Muriel Fagani**

#### *NOP*

She is concerned that the NOP cost \$5 to the public

She questions that nothing in the NOP is marked just "significant" but "potentially significant".

#### *General Plan and cumulative impacts*

Napa should be looking at this with the long term goals of the town with long term open space and agricultural buffer. She thinks the city has mixed emotions.

Napa's General Plan was decided in 1992, but it still hasn't been adopted. The cumulative effects of the General Plan are great, not just from Stanly Ranch but from Big Ranch, the South Napa Marketplace, the Soscol office complex, the winery museum in the floodway, Stanly Ranch, the Napa State Hospital Lands, the Richland land and even the Carneros lands, the Airport and American Canyon lands, Jamison Canyon land and Congress Valley lands.

She read a poem : Whither thou goest Napa? Who knowest?

We should have the General Plan in place first, then look at the major developments.

She questioned the "emergency road" to Cuttings Wharf being a small emergency road.

### **Mike Joelle.**

Stanly Ranch is well thought out but in the wrong place. Napa is not looking for a lot of growth.

#### *General Plan and timing of proposal*

He recommends this project is premature until the General Plan is in place. This takes direction from the Council. He recommends a moratorium on all projects such as this until the General Plan of the community is decided upon.

As the "father of the RUL line" he'd recommend that the RUL be revised so as not to include Stanly Ranch, as he and the Planning Commission recommended in the early 1970's to prevent sprawl.

This application precludes this RUL change being a viable General Plan option to be studied, and that's why this application is premature.

*p. 17. Energy Resources.* Need to look at amount of energy generated by all cars in this development (10-11/unit/day) Where will they shop, go to services? They'll be going into Napa. The EIR needs to look at energy consumption as this community lacks essential services. He doesn't advocate services out there but this should be noted as a big energy drain.

*p. 17 Under Local Services,* the EIR should address commercial services, and the EIR should assess gas and electric, cable services.

**Muriel Fagani**

*Alternative*

Under the no project alternative, is the vineyard a viable business by itself right now?



9/11/97  
Register

LE

## Stanly Ranch questions posed

Dear editor,

Regarding the Stanly Ranch project, I would like the elected officials of the City and County of Napa to reply to some questions I have.

● **Drinking water supply:**

We have been told that conservation must continue in spite of Lake Hennessey being filled the past two years. It was suggested that there won't be enough water for those ahead here and those building projects already approved. How much will it cost to pipe water to the Stanly Ranch area? Who will pay for it? Where will it come from?

● **Sewage disposal:** Since the Napa waste water plant is on the other side of the river a pipe line will have to be built under the river. There has also been talk of a second pipe line to bring treated water across for irrigation use. Is this environmentally safe? Is it consistent with the flood control project? Who will pay for this?

● **Drainage:** A system of drainage will be needed to drain rain water away from homes and the golf course. It will no longer be able to soak into the soil and slowly percolate to the river. Where will the water enter the river and how? What effect will it have on flooding? Not only below the project but above it in town as well?

● **Traffic:** Five hundred-plus homes means at least a thousand cars. Half at best will be coming and going during peak hours. Others constantly throughout the day. Plus there will be the workers and those who come to play golf. Caltrans has not yet been able to start the overpass at Trancas Street. How long would it be before the highway could be widened on more traffic lights installed? Those who wish to make a left turn now. Either toward Sonoma or Napa have a long wait at anytime on most days.

In one report the developers were stated as being willing and able to spend \$2 million on it. It spoke of all the jobs it would create. What kinds of jobs? Minimum wage? Would the building contracts go to Napa businesses or only to the lowest bidder?

There is a very old saying, "Don't look a gift horse in the mouth." It means you are probably getting a worn-out nag.

There is another saying that's so true, "Get it in writing." Don't rely on promises.

G. Furth  
Napa

## Harold R. Kelly

3450 MEADOWBROOK DR. NAPA, CA 94558  
PHONE (707) 255-7042 FAX (707) 255-0568

September 8, 1997

Jean Hasser  
City of Napa  
1600 First Street  
Napa, CA 94559-0660

**Re: Stanly Ranch Specific Plan EIR**



Dear Ms Hasser,

The following are a few points that need to be fully addressed in the Scope of EIR of the Stanly Ranch.

### **Land Use Planning:**

The site will have a Potentially Significant Impact (not no impact) on the disrupt or divide the physical arrangement of an established community. This property, although in the RUL line is about 3 miles from the established community of Napa. A site map detail showing the surrounding land uses for 1.5 miles will find no residential community at all. Such detail maps of the surrounding area must be included.

### **Alternatives:**

The EIR must examine the benefits of both a winery & vineyard project, and resort only project compared to the proposed project. They will both be found to be significantly beneficial to the City of Napa, compared to the proposed project.

### **Public Policy:**

Incorporation of the Draft General Plan by reference: The Draft General Plan has not had public hearings, nor been adopted. Therefore, the adoption of a Specific Plan District amendment to a General Plan that does not exist, can not be supported nor can the General Plan Designations of the yet to be approved Draft document be used. The existing City of Napa General Plan designates the site as a Study Area with no adopted designations.

### **Transportation/Circulation:**

Traffic Impacts: Cal Trans must make a full analysis of the impacts and highway improvements required, at the junction of Hwy. 29 and 12/121, for the proposed project and any alternative projects, for this EIR. The impacts of the traffic from this site on the highway and frontage road and Foster Road circulation as far North as Imola Ave. in Napa needs to be examined. How does this new additional traffic affect the Imola bridge?

### **Noise:**

The air traffic impacts will be a potentially significant impact on existing air traffic flight corridors, or the noise of the air traffic will have a potentially significant impact on the proposed residential and resort community. The relationship to the Napa airport needs to be reviewed.

**Visual Quality:**

Aesthetics: Entrance to Napa View from Hwy. 29: The 12 acres along Hwy. 29 referred to as the panhandle area would exhibit the rear side of the proposed wine center, winery, and commercial areas. This would be a significant impact on the existing view from Hwy. 29. This needs to be adequately discussed and illustrated.

**Air Quality:**

Weather Changes: What weather changes will occur when the project access roads require the removal of the mature tree windbreaks? How can the trees remain if City of Napa road standards are required? If mature trees are removed, how will it affect wind, temperature, and valley smog? How does it affect Visual Quality?

**Public Services:**

Revenue: A Cost/Benefit Study of the proposed project must be made for the proposed project and compared with other viable alternatives, including a winery and vineyard only, or resort only alternatives. The cost to the City of Napa for the operation of a Fire Station will use up all potential revenues. How does the proposed TOT tax revenue after deducting the costs of required city services compare with the alternative projects such as the resort only alternative?

**Hydrology, Drainage and Water Quality:**

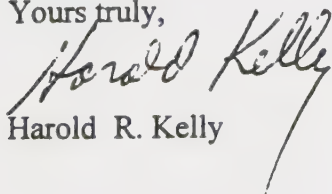
What are the cumulative impacts of storm run off from both the Stanly Ranch and the Airport Industrial Park Master Plan on the Napa River Flood Control Project in a 100 year storm event. Will these additional new significant run offs cause the proposed Napa River Flood Control Project to fail?

**Growth Inducement:**

The residential and resort development impact on the Napa Sanitation District. If the district has to expand sewer lines and then plant expansion to accommodate this development, then will it encourage fill in from the Stanly ranch north to the existing city boundaries to recover the investments. How will all of this expansion of growth affect the surrounding Carneros agricultural community? What impacts will this proposed development have on City of Napa General Plan goals if it encourages growth along Hwy. 29 to the existing city.

Please keep me informed of all public hearings and put me on your mailing list for any information relative to the Stanly Ranch.

Yours truly,



Harold R. Kelly



## *Napa River Reclamation District #2109*

---

1501 Milton Road  
Napa, CA 94559  
(707) 255-2996

This matter came on before the board of trustees of the Napa River Reclamation District as item 2 of new business on the published agenda for the regularly scheduled meeting of July 1, 1997:

### WHEREAS:

The Napa River Reclamation District Board of Trustees representing the inhabitants of Milton Road is empowered with authority under the ordinances of Napa County to act for the purposes of preserving the levee extending southward adjacent to Milton Road from South of the Napa Marina to the end of Edgerly Island;

Whereas a development has been proposed for the development of the Stanley-Ranch Property located North of Edgerly Island between Edgerly Island and the City of Napa;

Whereas the existing proposal for development of the Stanley Ranch will substantially impact over 200 acres of land by creating hundreds of acre feet of water run-off during storm season which will be drained into the Napa River between Napa City and Edgerly Island and;

Whereas the developers and proponents of the Stanley Ranch project have failed to adequately define mitigation measures for such flood influences on the Napa River during the raining season and;

Whereas, the impact of the lack of such flood control and mitigation measures will result in the inundation of Edgerly Island and the addition of hundreds of acre feet of water to downtown Napa creating the probability of catastrophic flooding in the city center;

THEREFORE: The Board of Trustees for the Napa River Reclamation District unanimously opposes the implementation of the existing plan for the development of the Stanley Ranch unless and until the City of Napa, and the County Board of Supervisors are satisfied that adequate mitigation measures have been installed to make certain that flood runoff created by the development of such non-agricultural uses at the Stanley Ranch will not enter the Napa River and cause catastrophic flooding to Edgerly Island and the City of Napa.

Unanimously enacted Napa River Reclamation District, Board of Trustees.



MARK S. POLLOCK  
Chairman



# SAINTSBURY

Napa City Planning Commission  
1600 First Street  
Napa, CA 94559

September 17, 1997

Members of the Commission:

I reside at 426 Seminary St. in Old Town, and am a General Partner of Saintsbury, a small winery in the Carneros region of Napa County. I wish to express my concern to you about the effect of the development of the Stanly Ranch on water supplies in the Carneros region. As you are aware, the vineyards on the ranch are presently irrigated using municipal water delivered to the property by pipeline. *Any* more intensive development will require additional water supplies, and the amount required to sustain a development of the size and scope the developer has proposed is large by any measure.

Anyone who has spent time in the Carneros region knows that water is a critical issue, for both domestic and agricultural uses. The Carneros receives rainfall as low as any part of the county. Wells of good quality and production at reasonable depths are rare; in fact, most wells yield scanty supplies of heavily mineralized water. In our vineyard development closest to the Stanly Ranch, we have spent considerable sums developing a reservoir for irrigation, in order to spare the aquifer for domestic uses. In view of the critical water supply here, I believe that there should be a total prohibition of the drilling of wells for any purpose on the Stanly Ranch. The water beneath the Stanly Ranch acts as a barrier to the intrusion of salt and brackish water from the Napa River. The seaward aquifers of the Salinas Valley are now contaminated by saltwater intrusion. It is vital to the welfare of the entire Carneros region that we not repeat the mistake of irreversibly contaminating irreplaceable aquifers. Please prohibit wells on the Stanly Ranch. This development, if approved, should satisfy its large thirst for water somewhere else.

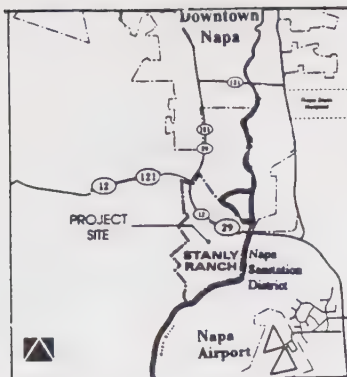
Sincerely yours,

David W. Graves  
General Partner

BONDED WINERY 5114

1500 LOS CARNEROS AVENUE • NAPA, CALIFORNIA 94559 • TELEPHONE (707) 252-0592 • FAX (707) 252-0595





## NOTICE OF COMPLETION AND AVAILABILITY OF DRAFT EIR PREPARED FOR THE DRAFT STANLY RANCH SPECIFIC PLAN

**NOTICE IS HEREBY GIVEN** by the Planning Department of the City of Napa that the Draft Environmental Impact Report (DEIR) (SCH#97092007) for the Draft Stanley Ranch Specific Plan has been completed and is available for public review and comment. **Date: August 7, 1998**

**Proposed Project:** The *Draft Stanley Ranch Specific Plan* project, which includes a General Plan Amendment, rezoning and anticipated Development Agreement, proposes the construction of a destination resort and golf course, winery and retail wine center, residential community, and open space on a 918 acre property in the southernmost part of the City of Napa. (See Map). The resort, to be owned and operated by Carefree Resorts, would include: a main lodge with restaurant, conference facility and retail uses; spa with swimming pool and tennis courts; 200 guest cottages and 100 resort units; an 18 hole golf course and clubhouse with restaurant and pro shop; a golf maintenance facility; an employee parking area and small interpretive center. The residential area is proposed to include up to 540 for sale homes in five neighborhoods; and up to 54 employee apartments. The 40,000 sq. ft. winery and 40,000 sq. ft. wine center would be located in the "panhandle" portion of the site near State Route 12/121. Lowlands along the Napa River would be preserved as open space. The main entrance to the proposed project is Stanley Lane at its intersection with SR 12/121. Stanley Lane would be improved for the project, including a signal at SR 12/121. Stanley Lane would connect to new private roads for the resort and residential area. An emergency-access-only connection would be provided to Cuttings Wharf Road from the western end of the property. Two new public trails are proposed as part of the project: a Bay Trail connection, and a segment of the Napa River Trail. Napa Sanitation District (NSD) is the preferred wastewater treatment provider. However, if capacity is unavailable from NSD, the project proposes to construct an onsite wastewater treatment/reclamation facility.

**Significant Effects:** The Stanley Ranch DEIR analyzes potentially significant impacts under the topics of land use; public policy; transportation; geology/seismicity; hydrology/drainage/water quality; biological resources; historic/cultural resources; visual quality; population/employment/housing; public services; public utilities; noise; public health and safety; and air quality. The project would have significant unavoidable impacts related to: increased traffic demands; increased regional air emissions; loss of historic resources; visual impacts; water quality; and biological resource impacts related to water quality.

**Public Review Period and Document Availability: August 7 through September 21, 1998**

A Notice of Completion and the DEIR have been circulated to agencies and through the State Clearinghouse. Interested members of the public are invited to review the Draft EIR and documents referenced in the EIR at the City of Napa Planning Department, 1600 First Street, Napa, CA. The DEIR is also available at the Napa City/County Library, 1150 Division Street, Napa, CA. Check-out copies are available at the Planning Department (subject to deposit of purchase price). Limited copies of the DEIR are also available for purchase at the Planning Department for \$50.00. Public Comments may be submitted on the DEIR throughout the 45-day Public Review period

**Planning Commission Hearing:** The Napa Planning Commission will hold a public hearing on the Draft EIR September 3, 1998, Napa City Council Chambers, 955 School Street, Napa, CA starting at 7 p.m.

**Submittal of Public Comments:** Please direct written comments to John Yost, Planning Director, Napa Planning Department, PO Box 660, Napa, CA 94559-0660. For additional information please call 707-257-9530. Department office hours are 8 a.m.-noon and 1-5 p.m. Comments must be received at the Planning Department by 5 p.m., September 21, 1998.

**Next Steps:** Following the public review period, the consultant will prepare responses to comments to complete the EIR. Hearings on the Final EIR and proposed project are expected to occur later in the fall.

**Please Note:** If a citizen challenges any of the above actions in court, said citizen may be limited to raising only those issues that they or someone else raised at the public hearing described above, or in written correspondence delivered to the City of Napa at, or prior to, the public hearing.





CITY of NAPA

*Appendix C*  
**Notice of Completion**

*State of California  
Office of Planning and Research  
1400 Tenth Street  
Sacramento, CA 95814*

**PLANNING DEPARTMENT**  
1600 First Street  
PO Box 660  
Napa, California 94559-0660  
(707) 257-9530

Stanly Ranch

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**Project Title**

Stanly Lane at SR 12/121

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**Project Location — Specific**

Napa

---

**Project Location — City**

Napa

---

**Project Location — County**

Golf Course Destination Resort and Residential Project also including winery and retail wine center

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**Description of Nature, Purpose, and Beneficiaries of Project**

City of Napa

---

**Lead Agency**

Planning

---

**Division**

1600 First Street, Napa, CA 94559

---

**Address Where Copy of EIR is Available**

August 7 through September 21, 1998

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**Review Period**

Jean Hasser, Associate Planner

---

**Contact Person**

707-257-9530

---

**Area Code / Phone / Extension**



Notice of Completion and Environmental  
Document Transmittal Form

Mail to: State Clearinghouse, 1400 Tenth Street, Sacramento, CA 95814 — 916/445-0613

See NOTE below

SCH # 97092007

1. Project Title Stanly Ranch  
2. Lead Agency City of Napa  
3a. Street Address 1600 First Street  
3b. City Napa  
3c. County Napa 3d. Zip 94559  
3e. Contact Person Jean Hasser, Assoc. Planner  
3f. Phone 707-257-9530

Project Location Stanly Lane south of SR 12/121; southernmost part of City of Napa

4. County Napa 4a. City/Community Napa  
4b. Assessor's Parcel No. 47-230-05; 47-240-010 thru 015; 47-262-001 4c. Section --- Twp. T5N Range R4W  
5a. Cross Streets Stanly Lane/SR 12/121; SR 29/12 5b. For Rural, Nearest Community ---  
6. Within 2 miles: a. State Hwy # 12/121; 29/12 b. Airports Napa County  
c. Railways N Vly Wine Tr, CNPRR d. Waterways Napa River

7. Document Type

CEQA: 01. ☐ NOP 05. ☐ Supplement/Subsequent EIR NEPA: 09. ☐ NOI OTHER: 13. ☐ Joint Document  
02. ☐ Early Cons (Prior SCH No.: ---) 10. ☐ FONSI 14. ☐ Final Document  
03. ☐ Neg Dec 06. ☐ NOE 11. ☐ Draft EIS 15. ☐ Other ---  
04. ☒ X Draft EIR 07. ☒ X NOC 12. ☐ EA 08. ☐ NOD

8. Local Action Type

01. ☐ General Plan Update 05. ☐ Annexation 09. ☒ X Rezone 12. ☐ Waste Mgmt Plan  
02. ☐ New Element 06. ☒ X Specific Plan 10. ☐ Land Division (Subdivision, 13. ☐ Cancel Ag Preserve  
03. ☒ X General Plan Amendment 07. ☐ Community Plan Parcel Map, Tract Map, etc.) 14. ☒ X Other Dev. Agreement  
04. ☐ Master Plan 08. ☐ Redevelopment 11. ☐ Use Permit

9. Development Type

01. ☒ X Residential: Units 594 Acres 105 07. ☐ Mining: Mineral ---  
02. ☐ Office: Sq.ft. --- Acres --- Employees --- 08. ☐ Power: Type --- Watts ---  
03. ☒ X Shopping/Commercial: Sq.ft. 40,000 Acres 6 Employees --- 09. ☒ X Waste Treatment: Type Tertiary pkg plant (alt. to NSD)  
04. ☒ X Industrial: Sq.ft. 40,000 Acres 6 Employees --- 10. ☐ OCS Related  
05. ☐ Water Facilities MGD --- 11. ☒ X Other: Golf Course Resort with 200 guest cottages and 100  
06. ☐ Transportation: Type --- resort units, lodge with conference facility, restaurants & spa, golf clubhouse 72,700 sq. ft

10. Total Acres 918

11. Total Jobs Created 500

12. Project Issues Discussed in Document

01. ☒ X Aesthetic/Visual 09. ☒ X Geologic/Seismic 17. ☐ Social 25. ☒ X Wetland/Riparian  
02. ☒ X Agricultural Land 10. ☒ X Jobs/Housing Balance 18. ☒ X Soil Erosion 26. ☒ X Wildlife  
03. ☒ X Air Quality 11. ☐ Minerals 19. ☒ X Solid Waste 27. ☒ X Growth Inducing  
04. ☒ X Archaeological/Historical 12. ☒ X Noise 20. ☒ X Toxic/Hazardous 28. ☒ X Incompatible Land Use  
05. ☐ Coastal Zone 13. ☒ X Public Services 21. ☒ X Traffic/Circulation 29. ☒ X Cumulative Effects  
06. ☐ Economic 14. ☒ X Schools 22. ☒ X Vegetation 30. ☐ Other ---  
07. ☒ X Fire Hazard 15. ☐ Septic Systems 23. ☒ X Water Quality  
08. ☒ X Flooding/Drainage 16. ☒ X Sewer Capacity 24. ☒ X Water Supply

13. Funding (approx.) Federal \$ --- State \$ --- Total \$ ---

14. Present Land Use and Zoning Study Area Land Use Designation: P-C Planned Community zoning; existing land use is grazing vineyard, 4 residences and a bunk house-residence

15. Project Description

A Specific Plan, General Plan Amendment, rezoning, potential Development Agreement, and other entitlements necessary to permit a resort, golf course, wine center, winery, residential and open space project on 918 acres. The resort includes a main lodge with restaurant, conference facility and retail uses, golf course with clubhouse, spa, 200 guest cottages, 100 resort units. The residential portion includes up to 540 for sale units and up to 54 employee housing apartments. Approximately 425 acres of lowlands would remain largely open and undeveloped (except for trails, parking lot and interpretive center, and utilities) adjacent to Napa River.

16. Signature of Lead Agency Representative Jean Hasser Date 8.16.98  
NOTE: Clearinghouse will assign identification numbers for all new projects. If a SCH number already exists for a project (e.g. from a Notice of Preparation or previous draft document) please fill it in.

## Reviewing Agencies 14 BY CH; 7 SENT DIRECTLY BY CITY

- |   |  |
|---|--|
| <input checked="" type="checkbox"/> Resources Agency                                      | <input type="checkbox"/> <del>Caltrans District 4</del> SENT DIRECTLY BY CITY            |
| <input checked="" type="checkbox"/> Boating / Waterways                                   | <input type="checkbox"/> <del>Dept. of Transportation Planning</del> SENT DIRECT BY CITY |
| <input type="checkbox"/> <del>Conservation</del> SENT DIRECTLY BY CITY                    | <input type="checkbox"/> <del>Aeronautics</del> SENT DIRECTLY BY CITY                    |
| <input type="checkbox"/> <del>Fish and Game</del> SENT DIRECTLY BY CITY                   | <input type="checkbox"/> California Highway Patrol                                       |
| <input checked="" type="checkbox"/> Forestry  | <input checked="" type="checkbox"/> Housing and Community Dev't                          |
| <input type="checkbox"/> Colorado River Board   | <input type="checkbox"/> Statewide Health Planning                                       |
| <input checked="" type="checkbox"/> Dept. Water Resources                                 | <input checked="" type="checkbox"/> Health   |
| <input type="checkbox"/> Reclamation  | <input checked="" type="checkbox"/> Food and Agriculture                                 |
| <input checked="" type="checkbox"/> Parks and Recreation                                  | <input type="checkbox"/> Public Utilities Commission                                     |
| <input type="checkbox"/> <del>Office of Historic Preservation</del> SENT DIRECTLY BY CITY | <input type="checkbox"/> Public Works  |
| <input checked="" type="checkbox"/> Native American Heritage Commission                   | <input type="checkbox"/> Corrections   |
| <input type="checkbox"/> S.F. Bay Cons. and Dev't. Commission                             | <input type="checkbox"/> General Services  |
| <input type="checkbox"/> Coastal Commission   | <input type="checkbox"/> OLA   |
| <input checked="" type="checkbox"/> Energy Commission                                     | <input type="checkbox"/> Santa Monica Mountains  |
| <input checked="" type="checkbox"/> State Lands Commission                                | <input type="checkbox"/> TRPA  |
| <input checked="" type="checkbox"/> Air Resources Board                                   | <input type="checkbox"/> OPR — OLGA  |
| <input checked="" type="checkbox"/> Solid Waste Management Board                          | <input type="checkbox"/> OPR — Coastal   |
| <input checked="" type="checkbox"/> SWRCB: Sacramento                                     | <input type="checkbox"/> Bureau of Land Management                                       |
| <input type="checkbox"/> <del>RWQCB: Region # 2</del> SENT DIRECTLY BY CITY               | <input type="checkbox"/> Forest Service  |
| <input type="checkbox"/> Water Rights   | <input type="checkbox"/> Other _____   |
| <input type="checkbox"/> Water Quality  | <input type="checkbox"/> Other _____   |

### For SCH Use Only:

Date Received at SCH _____	Catalog Number _____
Date Review Starts _____	Applicant _____
Date to Agencies _____	Consultant _____
Date to SCH _____	Contact _____ Phone _____
Clearance Date _____	Address _____

Notes: \_\_\_\_\_

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## Stanly EIR Scoping Remarks

### CEQA Checklist

Page 6: Show acreages, including acres of onsite parking. This is especially important when examining runoff.

Page 11, Items 1-c, d, and e: Move to Potentially Significant Impact column. Given that this is the gateway to The Carneros Appellation Region, conversion from agriculture to subdivision needs thorough examination.

Page 12, Item II-b: Move to Potentially Significant Impact Column. *Infill + Sprawl*

Page 13, Item III-i: Move to Potentially Significant Unless Mitigation column. The windrows form a major physical feature of the site.

Page 14, Item V-f and g: Move to Potentially Significant Unless Mitigation column. The project does not contain any assurances that groundwater will not be used, except to state that City water will be used. Some legal prohibition against new or deeper wells on the site must be included.

Page 15, Item V-a: Move to Potentially Significant column. There is no known mitigation for the added traffic-generated pollutants. This should be examined in the context of the North Bay Traffic Study.

Page 16, Item VI-g: Move to Potentially Significant column. Maps indicate that training flights take place frequently over the site. These aircraft pass over at 1000 ft. and generate more than 70db at that altitude.

Page 19, Item X-b: Move to Potentially Significant column. The airport map of CNEL is in error.

Page 21, Item XIII-c: Move to Potentially Significant. The conversion of this large "gateway" parcel from agriculture to subdivisions and resorts will forever cause new light.

Page 22, Item XIV-b: Jim

Page 23, Item XVI-x: Move to Potentially Significant Impact column. The impact of extending urban densities 2.5 miles south of Imola Avenue will create large acres of lands which can be expected to urbanize, because they will become "infill" parcels. The Draft General Plan cannot and should not be used in this proposed document, since it has not been reviewed in any public forum and has not completed its own EIR process.

## Scope of Work

### 1. Land Use

Describe and map surrounding land uses within one and one-half miles of this site. Since the surrounding lands are either agricultural or the river, the extent to which this urbanization intrudes into agriculture and open space must be shown precisely.

### 2. Public Policy

The Draft General Plan should not be used. It has not completed its own environmental review, and has not had any public review.

LAFCO should be included in the policy agencies, since it shows the area as outside of the City's Sphere of Influence.

### 3. Transportation and Circulation

Traffic impacts on Golden Gate Drive should be added, as should the interchange of Imola and SR 29. This will likely be a favored route of residents, once a traffic light is installed at Stanly Lane.

Traffic counts should be taken during AM peak and midday peak periods, as well as PM peak. Since the modeling does not include AM or midday, this information is needed, both for checking on the validity of the work, and for air quality projections.

When evaluating the emergency road adequacy, include a drawing of the Cuttings Wharf exit treatment, showing how only emergency vehicles and hikers or cyclists will have access.

### 4. Hydrology

Include the cumulative impacts of the increased runoff from areas in and around The Napa County Airport, when evaluating the storm water impacts with the Flood Control Project, the Regional Water Quality Board, and the local Resource agencies.

The mitigation measures should include a Storm Water Runoff Management Plan, not just a recommendation.

### 8. Visual Quality

The visual photographic views should include a view from Highway 29, 12/121 looking WEST-southwest, not just looking south. This view should include the sites of the commercial areas and the employee housing. There is no reason to show the river from 12/121 looking southeast.-, unless you want to model it at floodtime.

The rendered computer models should NOT include showing new tree plantings as if they are mature. Trees are very slow in reaching maturity. All visuals should show only existing mature trees. Where significant proposed trees are modeled, they should be done with a before and after type rendition.

The rendered computer model should show the project from the point along the Southern Crossing where the rooftops and parking areas will be the most visible.

### 13. Air Quality

The study should monitor and predict the traffic-generated pollutants which will impact the employee housing location.

### 15. Growth Inducement

The impact on the areas in the 2.5 miles between the project and Imola should be shown. This area becomes "infill".

The Brady/LSA team should prepare a full analysis of the resort only alternative. Members of City Councils, both past and present, have indicated an interest in examining this alternative. City staff should be sure this is included.

The City should request a quantitative analysis of traffic alternatives for all alternatives except the No Project Alternative.

*Ginny Simms*  
*21 Oak Grove Way*  
*Napa 224-2105*



**To: Planning Department, City of Napa**

**From: Thomas J. Davis, concerned citizen**

**Re: Stanly Ranch Specific Plan EIR**



Ladies and Gentlemen:

I believe that there are several items in Stanly Ranch plan which would have a potentially significant impact on the environment and without any mitigating benefits. I have described a few of the more serious impacts below:

### **LAND USE AND PLANNING**

*Conflicts with general plan* - There is no final general plan for the area in question, just a "draft" plan that has not been held up to public scrutiny. In the absence of a general plan, the land should be treated as if it were zoned in its current use, which is agriculture.

*Is incompatible with existing land use* - This plan is not compatible with existing land use as the property in question and all adjacent property is of agriculture use. Since the nearest city development is 2 ½ miles away, the plan can not be considered a natural expansion of the city.

*Affects agriculture resources or operations.* - The property is just east of the Carneros winegrape growing district, the premier producer of Chardonnay grapes in the United States. The development will have an effect on neighboring properties from changes in drainage patterns, pollution from vehicles. Neighboring vineyards would need to put up fences and increase security to protect their property. The property is bordered on two sides by the Napa River and much of the property lies on the flood plain. Increased drainage from winter rains will increase flood damage downstream and even upstream during high tides.

### **TRANSPORTATION AND CIRCULATION**

All traffic concerns will have a significant impact and should be viewed as such. The planned development would have a profound effect on traffic patterns in the Carneros district and throughout southern Napa. Residents of the subdivision would have to travel by car from their house to the City of Napa for all shopping and service needs. In addition Napa residents and tourists would need to drive to the property to use the services there. The increased traffic would put a substantial burden on Highway 29. The 29/12/121 intersection

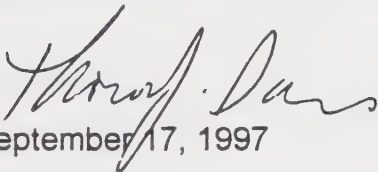
would need to be substantially improved upon. Highway 12/121 would need to be widened and traffic lights installed at Stanly Lane and maybe elsewhere. Traffic would also increase on Golden Gate Drive and Foster Avenue, the latter of which goes by an elementary school. Imola Avenue would also need to be improved from Foster to Coombs. The need for all of these improvements will divert resources from other areas in the City which need help. This development will have a significant impact on the traffic flow and traffic patterns, which will spread throughout the whole City

## AESTHETICS

*Scenic Vista or scenic highway* - There is currently a vista point on Highway 12/29 on the east side of the Southern Crossing. The development would be plainly visible from this viewpoint. It is certain to be an eyesore compared to the pristine agricultural land surrounding it.

*Have a demonstrable negative aesthetic affect.* - Both major highways from the Bay Area go past this proposed development. All visitors and returning Napans will view it. The view of rooftops (or the buildings themselves) will have a negative aesthetic effect. If the eucalyptus trees are cut down, the effect will be even more negative.

*Increased in-fill development* - The planning commission also needs to study the impact of further development between the Stanly Ranch and the City. This area will now be considered in-fill and much more prone to development. Much of the City's current development is in-fill following distant developments in Browns Valley and the Salvador Avenue area 20 years ago.

  
September 17, 1997

## City Hall

I can think of no better place to start my comments than at the beginning of the Stanly Ranch land use mistakes. In 1955 when the Stanly Ranch was annexed, we lived in a different time, where suburbia was the place to live as we saw all over the U.S. in the post WW II era. **We know today that the suburb developments, better known as sprawl, come at a high price to the tax payers i.e.,**

⇒ Infrastructure costs-the Stanly Ranch is currently outside the sphere of influence and LAFCO stated in 1970 that the Stanley Ranch was **'unworkable'**

⇒ In the case of the Stanly Ranch it would provide a bedroom community (for the bay area) with reliance on the automobile for long commutes and increased air pollution

⇒ Inefficient use of land, degrades quality of life by moving deeper and deeper into agricultural lands.

⇒ The Stanly Ranch is priceless agricultural land and should have never been annexed. It was a mistake in the 50's and should be corrected now



by deannexation in the new draft general plan that the City is currently working on.. (This statement has been made already by several citizens during the draft EIR phase of the draft general plan over a year ago.) We have not heard back from the city about our comments made on this .

**Setting a precedent for sprawl in our valley is not acceptable. By allowing the Stanley Ranch to develop as a suburb and creating sprawl we will :**

- ⇒ Create the next growth boundary for the RUL expansion
- ⇒ Create a scenario for infill of housing
- ⇒ Causes expansion of the 12/121 interchange
- ⇒ The Stanley Ranch development places over 1,000 homes, & 109,314 square feet of commercial/ retail business, 1,100 parking spaces and an 18 hole golf course right next to historic wetlands. The Department of Fish and Game has stated that this will cause a problem for our endangered species in this delicate area.
- ⇒ This huge development away from the city core creates a costly expenditure for the tax payers. We are submitting comments on the EIR and we have not seen a financial /economic analysis for this development.

⇒ The Stanly Ranch sits on **priceless agricultural lands**

⇒ If the City approves this development it will add significant runoff directly into the Napa River causing even more **flooding**

I submit to you a strong statement that the voting public does not want to see this kind of growth in our community and it should be stopped from any further forward momentum. I respectfully request a full public hearing before any amendment to the draft general plan is made. There is historical public record in which citizens have in the past voiced their concern that the Stanly Ranch remain agricultural land. I refer you to the 1993 Concept Report (pg. 3 ) where a *'19 member citizen's advisory committee was appointed to guide the City staff in preparation of a general plan . There task was the study and creation of a vision , followed by formulation of growth strategies and land use scenarios.'* For two years this group met and came forth with guidelines for the City staff. On page 30 of the 1993 Concept Report under **Organizing Principles for Planning** the CAC (Citizens' advisory Committee) stated first on their list that there

would be a: *Commitment to preservation of agriculture and the natural environment.* On page 41 *Land Use: A boundary surrounding the city protecting agricultural and open space lands from urban development by separating incompatible urban uses from the working landscape.* Two of three land use scenarios discussed by the CAC were eventually incorporated into land use alternatives. In scenario one page 48: *The City's existing open space gateways are retained. These gateways to Napa (i.e. highways 121 and 29) remain virtually unchanged. Entering Napa from the south where the highways split to travel up the east and west flanks of the valley, the current RUL and its attendant open space corridor remain as incorporated agricultural lands. To enhance this effect, residential development on land in the RUL fringe (e.g. Stanley Ranch, south Foster Road ) is not allowed because of their vineyards and permanent open space value.* This scenario regarding the Stanly Ranch was not adopted by the City staff. The **draft General Plan** that was available in 1996 for comment was released with 900 homes and 109,314 sq. ft. of commercial/industrial designation. Our current City General Plan has the Stanly Ranch as a study area.. That city staff have now worked with the developers to built 900 homes and 109,000



sq. ft. of commercial/industrial on agricultural land next to historic wetlands

is not appropriate land use designation for the City General Plan 2020.

My final general comment on the EIR is that all the aforementioned points are by nature not able to be mitigated. Therefore, the project should not go forward as currently purposed.

I have submitted other comments more specific to the Notice of Preparation

Thank You.

### **COMMENTS ON EIR SCOPING DOCUMENT:**

#### **I. LAND USE AND PLANNING**

a. would the proposal conflict with general plan designation or zoning? EIR states

**Potentially Significant Unless Mitigation Incorporated-** Should be *Potentially Significant Impact*

as all my opening comments addressed: *The land use proposed change to the general plan is*

*against most all the current general plan land use goals, objectives and policies. This is not*

*able to be mitigated*

#### **II. POPULATION AND HOUSING**

b. Induce substantial growth in an area either directly or indirectly (e.g. through projects in an undeveloped area or extension of major infrastructure)? The city has **potentially significant unless mitigation incorporated** this should be *potentially significant impact- due to encroachment into agricultural lands creating precedent for further abuse of agricultural lands and the precedent for housing infill*

*Another major concern is this project creates the need for substantially more low cost housing as the developer only provides 54 employee residences. We know this will not satisfy the 450 jobs available. Of these 54 residences the plan does not say that they will be affordable as low cost housing. This project further widens the chasm growing between the rich and poor in our community.*

### III. GEOLOGIC PROBLEMS

a. b. c. All state **Potentially Significant Unless Mitigation Incorporated** *-there is much to be mitigated in this section as the Stanly development sites on land effected by three faults- the Rodgers Creek, West Napa and Green Valley. A permit for three acres of fill to wetland areas is being requested by the developer. This will cause more shaking in that area of development. The whole site should follow ABAG recommendation that: Geotechnical studies and environmental reviews in areas of strongest shaking should be required to be performed by licensed professionals and go beyond statements of fact to include the conclusions and recommendations for appropriate mitigation.*

### IV. WATER

a. **Potentially Significant Unless Mitigation Incorporated-** *With over 1,000 homes, new roads, 109,314 square feet of commercial/industrial, and 1,100 parking spaces the runoff will be tremendous and will impact the flooding situation in the rest of the Napa City community. There is insufficient mitigation to deal with the cumulative runoff.*

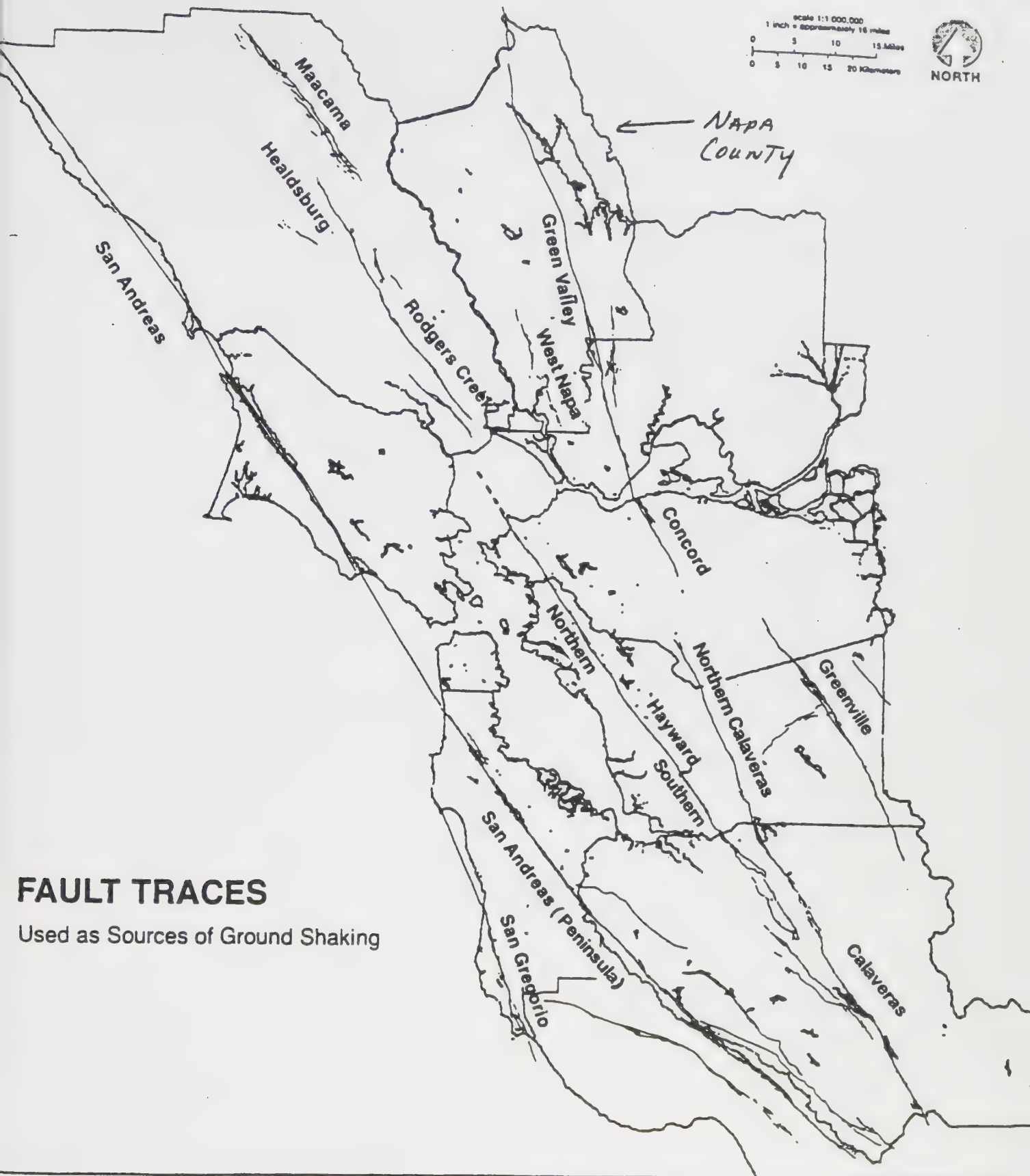
*f. The developer does not say that they will not drill wells. This needs to be definitively stated.*

## VII. BIOLOGICAL RESOURCES

a.) **potentially Significant Unless Mitigation Incorporated-Endangered, threatened, or rare species** or their habitats (including but not limited to plants, fish, insects, animals, and birds)? - *this is not able to be mitigated. You can not mitigate huge development on top of and immediately next to wetlands and uplands. The damaged put upon these sensitive areas is irreconcilable.*

Thank you for reading these concerns.





**FAULT TRACES**

Used as Sources of Ground Shaking

Source: *On Shaky Ground* - 1995  
**ABAG**<sup>®</sup>  
Association of Bay Area Governments

## As a local government elected official or staff member:

**The local agency is in the forefront because local government is at the action level and earthquakes do provide action.**

James E. McCarty,  
1986, former Oakland  
Public Works  
Director

Large variations in the level of ground shaking hazard exist in the San Francisco Bay Area. Thus, local government programs dealing with earthquake hazards should recognize these differences.

Mitigation options include:

- land use/zoning controls, particularly for critical or hazardous facilities;
- requirements for soils and geotechnical studies;
- special building design requirements;
- special requirements for nonstructural components;
- hazardous building retrofitting and abatement programs;
- programs to strengthen housing;
- special requirements related to hazardous materials;
- infrastructure and lifeline requirements;
- disclosure requirements and posting of signs;
- disaster response planning;
- reconstruction and redevelopment planning; and
- public information and education programs.

Policy statements on all of these strategies can become a part of the safety element of a jurisdiction's general plan. However, these *general plan policies must be backed by programs, ordinances and regulations to have any meaningful impact on our safety.*

A land use control might be to avoid particular problem areas in the siting of new critical facilities, such as fire stations. Zoning controls might include restrictions on facilities handling hazardous materials "on shakier ground."



Geotechnical studies and environmental reviews in areas of strongest shaking should be required to *be performed by licensed professionals and go beyond statements of fact to include the conclusions and recommendations for appropriate mitigation.*

Building codes should be recognized as only minimum standards. Construction supervision by a structural engineer can prove effective for critical facilities in high intensity areas. In addition, local governments should improve the qualifications and encourage specialized training and continued education for building department personnel responsible for structural review.

# NAPA COUNTY SIERRA CLUB

P. O. Box 644, Napa, CA 94559



September 17, 1997

Jean Hasser  
Associate Planner  
City of Napa Planning Department  
1600 First St.  
Napa, CA 94559

Dear Ms. Hasser:

The Sierra Club has reviewed the Notice of Preparation for the Draft Environmental Impact Report on the Stanly Ranch Specific Plan. The Club strongly opposes the project as proposed. We view the proposal as an unnecessary intrusion into a valuable, environmentally sensitive area and believe that a valid EIR will disclose the significant unmitigateable impacts it would cause to the environment of our community.

The Stanly Ranch is the gateway not only to the City of Napa but also to the world renowned Napa Valley. Uses allowed on the site should reflect what our Valley is famous for, not what happens to be most profitable for a group of land speculators and Texas investors. The EIR should recognize that establishment of commercial/residential uses at the site will cause significant unmitigateable changes to the character of this important community entry.

A list of issues that we believe should be addressed in the EIR is attached for your consideration.

Thank you for providing this opportunity to comment on the scope of the Stanly Ranch EIR.

Sincerely,

Dave Briggs  
Secretary



**Napa County Sierra Club  
Stanly Ranch Specific Plan  
Scoping Session Comments  
September 17, 1997**

**LAND USE AND PLANNING**

All impacts, including cumulative and those related to growth induced by the project, on agriculture in the Napa Valley and surrounding region should be addressed.

Since the sponsors may be exempt from further environmental review after the specific plan stage, detailed environmental review of all impacts related to housing construction and activities of future inhabitants must be addressed in the Specific Plan EIR.

**POPULATION AND HOUSING**

A detailed breakdown of housing types by affordability category should be provided along with income need categories for market rate housing.

Project impacts on the city's ability to meet goals of the existing Housing Element should be addressed.

**GEOLOGY**

Identification of soil types and soil horizon throughout the ranch should be provided together with a discussion of the suitability of these soils for agricultural use.

The value of different zones for recharge of groundwater should be analyzed.

**WATER**

Disclosure of impact on the current City water supply capacity. Need for and anticipated method of providing additional water pressure to adequately serve the project should also be addressed.

Disclosure of impacts that may result from construction and operation of an onsite wastewater treatment/reclamation facility.

**AIR QUALITY**

Quantified data on criteria air pollutants caused directly by the project and by project induced growth.

Impacts that urban use of the Stanly Ranch would have on current services should be addressed.

### UTILITIES AND SERVICE SYSTEMS

Impacts for each of the two potential sites of a fire station including noise and safety issues related to emergency vehicle travel along anticipated routes to and from the project site.

Impact to NSD including impact of construction and operation of a cross river pipeline, and quantitative information on wastewater generated and its anticipated BOD load.

Potential impacts to the river and nearby inhabitants due to sewage pipe rupture as has occurred during flooding of the river above Trancas Street.

### AESTHETICS

Views of the Stanly Ranch from all highway approaches, from the proposed public trails and from the river should be presented. The applicant should demonstrate how the site would look during the proposed phases of Eucalyptus tree removal.

A visual and written description of the views and environs Bay Trail users would experience along the proposed trail should be provided.

### RECREATION

Impacts that fire station construction at the proposed site would have on the quantity of recreational land available in the immediate area.

September 17, 1997

Jean Hesser, Senior Planner  
Planning Department  
P O Box 660  
Napa, CA 94559-0660

SUBJECT: NOTICE OF PREPARATION-STANLY RANCH

Dear Ms. Hesser,

I was suprised and shocked to see that the initial study is too general and lacking in quantitative data to come to its conclusions and categorizations of no significant potential environmental impacts for the proposed project.

The alternative for the winery and vineyards only might merit a mitigated negative declaration.

Appendix G-Significant Effects (CEQA) are defined as "Converting prime agricultural land to non-agricultural use or impair the agricultural productivity of prime agricultural land;"

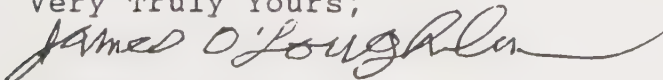
- (a) Conflict with adopted environmental plans and goals of the community where it is located;"
- (b) Have a substantial, demonstrable negative aesthetic effect;"
- (h) Substantially degrade or deplete ground water resources;"
- (l) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system;"
- (n) encourage activities which result in the use of large amounts of fuel, water or energy in a wasteful manner;"

These are some of the major significant unmitigated effects, of the resort and housing project, which aren't adequately covered.

The following pages contain more detailed comments organized by topic of impact.

Thank you for the opportunity to comment.

Very Truly Yours;



James O'Loughlin  
1449 Sheridan Dr.  
Napa, CA 94558



## O'Loughlin/Stanley Ranch

The Draft Environmental Impact Report and Notice of Preparation shall be sent to the State Air Resources Board and the San Francisco Bay Air Quality Management District for their comments because highways are involved in the proposed project. The U. C. Natural Land & Water Reserve System is a Trustee Agency designated by CEQA. Are they impacted by the proposed project?

III. Geological Problems.

Trench to investigate the linear surface breaks due to the West Napa fault zone shown on USGS-HUD maps. Include California Division of Mines and Geology in the investigation so that they can make a determination about extending the Alquist-Priolo Special Study Zone northerly through the proposed project. Items a, b, c, g, & h would be Potentially Significant Impact based on US Geological Survey, Soil Conservation Service and State Dept. of Mines & Geology data.

V. Water.

Items a, b, c, f, h and i would be Potentially Significant Impact based on the experience of many persons and agencies concerns reflecting water impacts, flood history and amount of site being paved and commonly accepted professional observations.

VI. Transportation/Circulation.

Items a, b, c & g would be Potentially Significant Impact. The potential effects of increased vehicle trips on air quality and noise shall be modeled by computer simulations including saving the eucalyptus windrows.

The proposed entrance road should be placed between the 12/121 expressway & the windrows of existing trees. The existing Stanley Lane should be used as a trail between the eucalyptus windrows for walking and jogging or bicycles to save the trees.

Appendix G-Significant Effects (CEQA) are defined as causing an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system; and increase substantially the ambient noise levels for adjoining areas. That's this project.

The scope of the traffic study is inadequate.

It shall include all alternatives including the winery & crops. Include impacts and mitigations for Golden Gate Drive intersections with Stanley Lane & Foster Road.

Include A. M. and noontime weekday peak period counts.

Caltrans trip generation models shall be used (ie. 10 adt/unit). Traffic Mitigation Measures such as the partial grade separations are unfeasible. The Metropolitan Transport. Comm. has given higher priority to the Trancas/ Redwood Road/ 29 interchange and repair existing bridges and grade separations to stronger earthquakes. Postponement of mitigation measures has not been allowed by the courts in the Sundstrum vs. Mendocino County Case and the Oro Fino vs. El Dorado County case.

#### VIII. Energy and Mineral Resources.

Items a & b would be Potentially Significant Impact.

The unmitigated use of non-renewable energy resources such as gasoline & diesel fuel and motor oil will result due to the leapfrog, urban-sprawl nature of the proposed project except for the winery & crops alternative.

#### XIII. Aesthetics.

Items a, b & c would be Potentially Significant Impact.

The view from the highway will be the rear of the shopping center and employees housing and have a significant demonstrable negative effect. The proposed roadways would destroy the windrows of existing closely spaced tall trees.

Light and glare especially from the shopping center, golf driving range and tennis courts will create a significant negative impact for viewers from publically owned scenic viewpoint such as the Napa River and its east bank, Skyline Park, and the Caltrans scenic vista in addition to destruction of agricultural aesthetic of the only southern gateway that is not visually impaired by commercial, residential or industrial structures. BCDC data shows that there is slight heavy industry north west of Napa River and San Pablo Bay shoreline. Appendix G (CEQA) fits the Stanley Ranch; " A project will normally have a significant effect on the environment if it will have a substantial, demonstrable negative aesthetic effect."

O'Loughlin

XIV.Cultural Resources.

Based on the following nearby archeological research, the the proposed Stanley Ranch project could have a significant impact. Existing environmental documents for the Southern Crossing indicate a large indian village with pit houses and burials on the east side of the Napa River for which Caltrans financed a major salvage dig. The Airport Master Environmental Assessment prepared by Archeological Resource Services, Inc. for Napa County indicated substantial likelihood of archeological resources near certain types of land forms which also exist on the Stanley Ranch as well as the nearby Napa County Airport study area. The archeological reports shall be submitted to and approved by the Suscol Indian Council and Sonoma State University Clearinghouse.

How many previous archeological reports has the City's chosen consultant prepared for Napa Valley sites? How many significant sites has he found? What is his education and experience? Archeologists are not required to pass a registration examination as are geologists, foresters, architects and other professionals, so his education and experience are important.

Traffic Noise.

The noise contour on Caltrans maps shall be mitigated to a non-significant size by mitigation measures installed in the employee's housing and other impacted areas.



Richard Niemann  
P. O. Box 3761  
Napa, California 94558

September 17, 1997

Jean Hasser, Planner  
City of Napa Planning Dept.  
1600 First Street  
Napa, California 94559

Concerning the "Stanly Ranch Specific Plan EIR."

The following is an outline summary of my comments, questions, and concerns presented at the public scoping meeting on September 17, 1997.

References made relate to the City of Napa Planning Department's "Notice of Preparation of a Draft Environmental Impact Report" on The Stanly Ranch Specific Plan dated August 28, 1997.

**I Land Use And Planning** page 11  
**d) Affect agriculture resources or operations?**

*•This is a potentially significant impact without possible mitigation since there will be a net loss of agricultural acreage.*

**e) Disrupt or divide the physical arrangement of an established community?**

*•Brady and Associates (the consultants) are being asked to describe and map surrounding land uses within 1/2 mile of the project. The Carneros area is a unique and diverse neighborhood that is much larger and complex than identified here (1/2 mile). All Carneros residents will be impacted and this item should be considered "Potentially Significant."*

.....

**II Population And Housing** page 12  
**b) Induce substantial growth in an area either directly or indirectly?**

**15. Growth Inducement** page A-15

*•Infill and Sprawl are very big issues here. This project will induce both. This is unmitigatable and should be identified as such.*

**9. Population, Employment and Housing** page A-17

*•Employee housing units (54) are inadequate in this project and affordable housing in Napa is insufficient. Additional employee housing or affordable housing should be required.*

## III Geologic Problems

page 13

## i) Unique geologic or physical features

## 4. Geology, Soils, and Seismicity

page A-6

*•The levees and Eucalyptus wind rows should be considered unique physical features. Item III-i) should be moved to Potentially Significant Unless Mitigated. The levees are constructed of alluvial sediments and have, "not been fully evaluated."*

.....

## IV Water

page 14

a) Changes in absorption rates, drainage patterns, or the rate and amount of surface runoff?

c) Discharge into surface waters or other alteration of surface water quality?

h) Impacts on ground water quality?

## 5. Hydrology, Drainage, and Water Quality

pages A-7 &amp; A-8

*•All hard surfaces, pavement and roof tops, should be measured to calculate run off and water quality impacts. To identify number of parking spaces is inadequate, total square footage should be used.*

*•None of these impacts ( IV a, c, or h) can be fully mitigated. Whether water is managed as runoff or percolates through the soil into the aquifer it will eventually reach the Napa River carrying with it insecticides, fertilizers, construction chemicals, household fluids, and road grime. The Scoping Statements on page A-8 should read:*

*The proposed development of the project "will" result in degradation of water quality.*

*Urban runoff generated by development of the site typically carries a number of water contaminants that "will" enter streams, wetlands, and ground water resources.*

*The operation of the proposed golf course "will" also present a significant source of fertilizers and pesticides.*

.....

## VI Transportation/Circulation

page 16

a) Increased vehicle trips or traffic congestion?

e) Hazards or barriers for pedestrians or bicycles?

*• Will the widening of Stanly Lane require tree removal?*

*• All roads past the panhandle are proposed to be private. Does this mean they will be gated and will this create congestion and uneven traffic flow?*

VII Biological Resources

page 17

d) Wetland habitat

6. Biologic Resources

page A-9-11

- *The scoping on page A-11 states: "...operation of the proposed golf course could result in impacts to any wetlands since run-off could contain large quantities of pesticides and fertilizers; other impacts could result from run-off from pavement containing oil and grease and other pollutants ..."* Similar concern and study should be given to the Residential, Resort, Commercial, and Winery developments.
- .....

XIII Aesthetics

page 21

- a) Affect a scenic vista or scenic highway?
- b) Have a demonstrable negative aesthetic?

- *Comments on page 21 state, "The Specific Plan proposes to preserve and maintain the screening windrows to the greatest extent possible. ..." What does, "to the greatest extent possible," mean? If windrow trees are removed or damaged, will new trees be planted?*





# United States Department of the Interior

## FISH AND WILDLIFE SERVICE

Sacramento Fish and Wildlife Office  
3310 El Camino Avenue, Suite 130  
Sacramento, California 95821-6340

PPN 2408

September 23, 1997

Jean Hasser  
City of Napa Planning Department  
1600 First Street, PO Box 660  
Napa, California 94559

SEP 1997  
RECEIVED  
City of Napa  
Planning

Subject: Notice of Preparation of a Draft Environmental Impact Report; Stanly Ranch Specific Plan Environmental Impact Report, Napa River, City and County of Napa, California

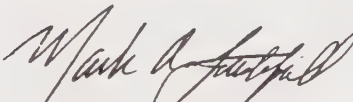
Dear Ms. Hasser:

Thank you for the opportunity to review the Notice of Preparation for a Draft Environmental Impact Report related to the Stanly Ranch Specific Plan. The attached enclosures are intended to assist you in the early environmental review of this proposal. Future consultation with the U.S. Fish and Wildlife Service (Service) may be required under the provisions of the Fish and Wildlife Coordination Act or the Endangered Species Act, if project activities are anticipated to affect federally listed endangered species or impact jurisdictional wetlands.

Enclosure A provides a list of sensitive species that may occur in or near the project site and general survey guidelines. The Service recommends that surveys be completed by a qualified biologist on the proposed project site to confirm the presence or absence of special-status species or their habitats. Enclosure B recommends general guidelines for identifying and mitigating project impacts to fish, wildlife, and their habitats. The Council on Environmental Quality developed regulations for implementing the National Environmental Policy Act (NEPA), and defines mitigation to include: (1) avoiding the impact; (2) minimizing the impact; (3) rectifying the impact; (4) reducing or eliminating the impact over time; and (5) compensating for impacts. The Service supports and adopts this definition of mitigation and considers the specific elements to represent the desirable sequence of steps in the mitigation planning process. Accordingly, we maintain that the best way to mitigate for the adverse biological impacts is avoidance when at all possible.

We encourage you to use these guidelines to develop a comprehensive environmental document that addresses these needs. If you have any questions regarding these comments, please contact Janice Gan in the Wetlands Branch at (916) 979-2113.

Sincerely,

  
• For Wayne S. White  
Field Supervisor

Enclosures

cc: ARD-KCE-Portland, OR  
FWS-ES, Section 7  
Reg. Mgr., CDFG, Region 3, Yountville  
(w/o enclosures)

## ENCLOSURE A

**Endangered Species.** This attachment identifies those listed, proposed, candidate, and/or species of concern that may occur in the proposed project area. Information and maps concerning candidate species in California may be obtained from the California Natural Diversity Data Base, a program administered by the California Department of Fish and Game. Requests for information should be addressed to the Marketing Manager, California Department of Fish and Game, Natural Diversity Data Base, 1416 Ninth Street, Sacramento, California 95814. The marketing manager may be contacted by calling (916) 324-0562. You may request additional information from the Chief, California Department of Fish and Game, Non-Game Heritage Program, at (916) 324-8348.

Listed species are fully protected under the mandates of the Endangered Species Act (Act), as amended. Section 9 of the Act and its implementing regulations prohibit the "take" of a federally listed fish and wildlife species by any person, as defined by the Act. Take is defined by the Act "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect" any such species. Take may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or shelter (50 CFR § 17.3).

Take incidental to an otherwise lawful activity may be authorized by one of two procedures. If a Federal agency is involved with the permitting, funding, or carrying out of this project, initiation of formal consultation is required between that agency and the Service pursuant to section 7 of the Act if it is determined that the proposed project may affect a federally listed species. Federal agencies must confer if they determine that the continued existence of a proposed species may be jeopardized by the project. Such consultation or conference could result in a biological opinion that addresses anticipated effects of the project to listed and proposed species. The biological opinion may authorize a limited level of incidental take for federally listed species.

If a Federal agency is not involved with the project, and federally listed species may be taken as part of the project, then an "incidental take" permit pursuant to section 10(a) of the Act should be obtained. The Service may issue such a permit upon completion by the permit applicant of a satisfactory conservation plan for the listed species that may be affected by the project.

We recommend that appropriately designed surveys for listed, proposed, candidate, and species of concern be undertaken by qualified biologists. Surveys for plants should not be restricted to the identified species; instead, a complete botanical inventory of the project site should be conducted. Botanical surveys should be conducted at intervals throughout the spring and summer, in order to maximize the likelihood of encountering each species during the season most appropriate for accurate identification. Surveys should be based on field inspection, and not on prediction of occurrence based on habitat or physical features of the site. Guidelines for conducting adequate botanical surveys are available from the Natural Heritage Division of the California Department of Fish and Game at (916) 322-2493.



The results of all biological surveys should be published in the environmental impact report. The report should include a brief discussion of survey methods (including sampling methods and timing of surveys), results (including a list of all species encountered as well as maps of vegetation types, populations of plant species, and breeding, nesting or burrowing sites or other habitat components important to animal species), and conclusions. If it is concluded that a given sensitive species is not present, the justification for this conclusion should be fully explained.

Should these surveys determine that federally listed, proposed, or candidate species occur in the area and are likely to be affected by the proposed project, the Service recommends that the project proponent, in consultation with this office and the California Department of Fish and Game, develop a plan that mitigates for the project's direct and indirect impacts to listed species and compensates for project-related loss of habitat. The mitigation plan also should be included in the environmental document.

Candidate species are currently being reviewed by the Service and are under consideration for possible listing as endangered or threatened. Candidate species have no protection under the Endangered Species Act, but are included for your consideration as it is possible that one or more of these candidates could be proposed and listed before the subject project is completed. One of the benefits of considering candidate species as well as listed and proposed species early in the process is that by exploring alternatives, it may be possible to avoid conflicts that could develop, should a candidate species become listed before the project is complete. In addition, in instances where the Service addresses proposed projects under its Fish and Wildlife Coordination Act authority, we must also analyze the impacts on candidate species and make recommendations to mitigate any adverse effects.

In the Federal Register of February 28, 1996, the Service changed its policy on candidate species. The term *candidate* now strictly refers to species for which the Service has on file enough information to propose listing as endangered or threatened. Former *category 2* candidate species - species for which listing is possibly appropriate but for which the Service lacks sufficient information to support a listing proposal - are now called *species of concern*. They are no longer monitored by the Service. However we have retained them on the enclosed list for general information. We encourage consideration of them in project planning, as they may become candidate species in the future.

ATTACHMENT A  
Endangered and Threatened Species that May Occur in  
or be Affected by Projects in the Following Selected Quads  
September 22, 1997

QUAD : 483A CUTTINGS WHARF

**Listed Species**

Mammals

salt marsh harvest mouse, *Reithrodontomys raviventris* (E)

Birds

American peregrine falcon, *Falco peregrinus anatum* (E)

California brown pelican, *Pelecanus occidentalis californicus* (E)

California clapper rail, *Rallus longirostris obsoletus* (E)

western snowy plover, *Charadrius alexandrinus nivosus* (T)

bald eagle, *Haliaeetus leucocephalus* (T)

northern spotted owl, *Strix occidentalis caurina* (T)

Amphibians

California red-legged frog, *Rana aurora draytonii* (T)

Fish

tidewater goby, *Eucyclogobius newberryi* (E)

winter-run chinook salmon, *Oncorhynchus tshawytscha* (E)

winter-run chinook salmon critical habitat, *Oncorhynchus tshawytscha* (E)

delta smelt, *Hypomesus transpacificus* (T)

coho salmon - central CA coast, *Oncorhynchus kisutch* (T)

Central California steelhead, *Oncorhynchus mykiss* (T)

Invertebrates

California freshwater shrimp, *Syncaris pacifica* (E)

Plants

Contra Costa goldfields, *Lasthenia conjugens* (E)

**Proposed Species**

Fish

Sacramento splittail, *Pogonichthys macrolepidotus* (PT)

Invertebrates

callippe silverspot butterfly, *Speyeria callippe callippe* (PE)

QUAD : 483A CUTTINGS WHARF

**Proposed Species**

Plants

soft bird's-beak, *Cordylanthus mollis ssp. mollis* (PE)

showy Indian clover, *Trifolium amoenum* (PE)

**Candidate Species**

Amphibians

California tiger salamander, *Ambystoma californiense* (C)

**Species of Concern**

Mammals

greater western mastiff-bat, *Eumops perotis californicus* (SC)

long-eared myotis bat, *Myotis evotis* (SC)

fringed myotis bat, *Myotis thysanodes* (SC)

long-legged myotis bat, *Myotis volans* (SC)

Yuma myotis bat, *Myotis yumanensis* (SC)

Pacific western big-eared bat, *Plecotus townsendii townsendii* (SC)

Suisun ornate shrew, *Sorex ornatus sinuosus* (SC)

Birds

tricolored blackbird, *Agelaius tricolor* (SC)

Bell's sage sparrow, *Amphispiza belli belli* (SC)

western burrowing owl, *Athene cunicularia hypugea* (SC)

ferruginous hawk, *Buteo regalis* (SC)

little willow flycatcher, *Empidonax traillii brewsteri* (SC)

saltmarsh common yellowthroat, *Geothlypis trichas sinuosa* (SC)

black rail, *Laterallus jamaicensis* (SC)

San Pablo song sparrow, *Melospiza melodia samuelis* (SC)

Reptiles

northwestern pond turtle, *Clemmys marmorata marmorata* (SC)

California horned lizard, *Phrynosoma coronatum frontale* (SC)



## QUAD : 483A CUTTINGS WHARF

**Species of Concern**

## Amphibians

- foothill yellow-legged frog, *Rana boylei* (SC)
- western spadefoot toad, *Scaphiopus hammondi* (SC)

## Fish

- green sturgeon, *Acipenser medirostris* (SC)
- river lamprey, *Lampetra ayresi* (SC)
- Pacific lamprey, *Lampetra tridentata* (SC)
- longfin smelt, *Spirinchus thaleichthys* (SC)

## Invertebrates

- Ricksecker's water scavenger beetle, *Hydrochara rickseckeri* (SC)

## Plants

- Suisun Marsh aster, *Aster lentus* (SC)
- valley spearscale, *Atriplex joaquiniana* (SC)
- delta tule-pea, *Lathyrus jepsonii* var. *jepsonii* (SC)
- legenere, *Legenere limosa* (SC)
- Mason's lilaeopsis, *Lilaeopsis masonii* (SC)
- Marin knotweed, *Polygonum marinense* (SC)

## QUAD : 500D NAPA

**Listed Species**

## Mammals

- salt marsh harvest mouse, *Reithrodontomys raviventris* (E)

## Birds

- American peregrine falcon, *Falco peregrinus anatum* (E)
- bald eagle, *Haliaeetus leucocephalus* (T)
- northern spotted owl, *Strix occidentalis caurina* (T)

## Amphibians

- California red-legged frog, *Rana aurora draytonii* (T)

QUAD : 500D NAPA

**Listed Species**

Fish

Central California steelhead, *Oncorhynchus mykiss* (T)

Invertebrates

California freshwater shrimp, *Syncaris pacifica* (E)

Plants

Contra Costa goldfields, *Lasthenia conjugens* (E)

**Proposed Species**

Fish

Sacramento splittail, *Pogonichthys macrolepidotus* (PT)

Plants

showy Indian clover, *Trifolium amoenum* (PE)

**Candidate Species**

Amphibians

California tiger salamander, *Ambystoma californiense* (C)

**Species of Concern**

Mammals

greater western mastiff-bat, *Eumops perotis californicus* (SC)

long-eared myotis bat, *Myotis evotis* (SC)

fringed myotis bat, *Myotis thysanodes* (SC)

long-legged myotis bat, *Myotis volans* (SC)

Yuma myotis bat, *Myotis yumanensis* (SC)

Pacific western big-eared bat, *Plecotus townsendii townsendii* (SC)

Birds

Bell's sage sparrow, *Amphispiza belli belli* (SC)

western burrowing owl, *Athene cunicularia hypugea* (SC)

little willow flycatcher, *Empidonax traillii brewsteri* (SC)

QUAD : 500D NAPA

**Species of Concern****Reptiles**northwestern pond turtle, *Clemmys marmorata marmorata* (SC)**Amphibians**, *Rana aurora aurora* (SC)foothill yellow-legged frog, *Rana boylei* (SC)western spadefoot toad, *Scaphiopus hammondi* (SC)**Invertebrates**Ricksecker's water scavenger beetle, *Hydrochara rickseckeri* (SC)**Plants**alkali milk-vetch, *Astragalus tener* var. *tener* (SC)valley spearscale, *Atriplex joaquiniana* (SC)Mason's lilaeopsis, *Lilaeopsis masonii* (SC)**KEY:**

(E) <i>Endangered</i>	Listed (in the Federal Register) as being in danger of extinction.
(T) <i>Threatened</i>	Listed as likely to become endangered within the foreseeable future.
(P) <i>Proposed</i>	Officially proposed (in the Federal Register) for listing as endangered or threatened.
(C) <i>Candidate</i>	Candidate to become a <i>proposed</i> species.
(SC) <i>Species of Concern</i>	May be endangered or threatened. Not enough biological information has been gathered to support listing at this time.
(*)	Possibly extinct.
<i>Critical Habitat</i>	Area essential to the conservation of a species.



## ENCLOSURE B

The goal of the U.S. Fish and Wildlife Service is to conserve, protect and enhance fish, wildlife, and their habitats by timely and effective provision of fish and wildlife information and recommendations. To assist us in accomplishing this goal, we would like to see the items described below discussed in your environmental documents for the proposed project.

**Project Description.** The document should very clearly state the purposes of, and document the needs for, the proposed project so that the capabilities of the various alternatives to meet the purposes and needs can be readily determined.

A thorough description of all permanent and temporary facilities to be constructed and work to be done as a part of the project should be included. The document should identify any new access roads, equipment staging areas, and gravel processing facilities which are needed. Figures accurately depicting proposed project features in relation to natural features (such as streams, wetlands, riparian areas, and other habitat types) in the project area should be included.

**Affected Environment.** The document should show the location of, and describe, all vegetative cover types in the areas potentially affected by all project alternatives and associated activities. Tables with acreages of each cover type with and without the project for each alternative would also be appropriate. We recommend that all wetlands in the project area be delineated and described according to the classification system found in the Service's Classification of Wetlands and Deepwater Habitats of the United States (Cowardin 1979). The Service's National Wetland Inventory maps would be one starting point for this effort.

The document should present and analyze a full range of alternatives to the proposed project. At least one alternative should be designed to avoid all impacts to wetlands, including riparian areas. Similarly, within each alternative, measures to minimize or avoid impacts to wetlands should be included.

Lists of fish and wildlife species expected to occur in the project area should be in the document. The lists should also indicate for each species whether or not it is a resident or migrant, and the period(s) of the year it would be expected in the project area.

**Environmental Consequences.** The sections on impacts to fish and wildlife should discuss impacts from vegetation removal (both permanent and temporary), filling or degradation of wetlands, interruption of wildlife migration corridors, and disturbance from trucks and other machinery during construction and/or operation. These sections should also analyze possible impacts to streams from construction of outfall structures, pipeline crossings, and filling. Impacts on water quality, including nutrient loading, sedimentation, toxics, biological oxygen demand, and temperature in receiving waters should also be discussed in detail along with the resultant effects on fish and aquatic invertebrates. Discussion of indirect impacts to fish, wildlife, and their habitats, including impacts from growth induced by the proposed project,

should also be addressed in the document. The impacts of each alternative should be discussed in sufficient detail to allow comparison between the alternatives.

The cumulative impacts of the project, when viewed in conjunction with other past, existing, and foreseeable projects, need to be addressed. Cumulative impacts to fish, wildlife, wetlands and other habitats, and water quality should be included.

**Mitigation Planning.** Under provisions of the Fish and Wildlife Coordination Act, the Service advises the U.S. Army Corps of Engineers on projects involving dredge and fill activities in "waters of the United States", of which wetlands and some riparian habitats are subcategories. Since portions of this proposal may ultimately require a Corps permit, the Service will subsequently be involved under the Coordination Act. Therefore, if you have not done so already, we suggest that you or your representative consult the Corps regarding onsite wetlands and related habitats that may fall under their jurisdiction, and include this information in the draft document. When reviewing Corps public notices, the Service generally does not object to projects meeting the following criteria:

1. They are ecologically sound;
2. The least environmentally damaging reasonable alternative is selected;
3. Every reasonable effort is made to avoid or minimize damage or loss of fish and wildlife resources and uses;
4. All important recommended means and measures have been adopted, with guaranteed implementation to satisfactorily compensate for unavoidable damage or loss consistent with the appropriate mitigation goal; and
5. For wetlands and shallow water habitats, the proposed activity is clearly water dependent and there is a demonstrated public need.

The Service may recommend the "no project" alternative for those projects which do not meet all of the above criteria, and where there is likely to be a significant fish and wildlife resource loss.

When projects impacting waterways or wetlands are deemed acceptable to the Service, we recommend full mitigation for any impacts to fish and wildlife. The Council on Environmental Quality regulations for implementing the National Environmental Policy Act define mitigation to include: 1) Avoiding the impact; 2) minimizing the impact; 3) rectifying the impact; 4) reducing or eliminating the impact over time; and 5) compensating for impacts. The Service supports and adopts this definition of mitigation and considers the specific elements to represent the desirable sequence of steps in the mitigation planning process. Accordingly, we maintain that the best way to mitigate for adverse biological impacts is to avoid them altogether.



The document should describe all measures proposed to avoid, minimize, or compensate for impacts to fish and wildlife and their habitats. The measures should be presented in as much detail as possible to allow us to evaluate their probable effectiveness.

Because of their very high value to migratory birds, and their ever-increasing scarcity in California, our mitigation goal for wetlands (including riparian and riverine wetlands) is no net loss of in-kind habitat value or acreage (whichever is greater).

For unavoidable impacts, to determine the mitigation credits available for a given mitigation project, we evaluate what conditions would exist on the mitigation site in the future in the absence of the mitigation actions, and compare those conditions to the conditions we would expect to develop on the site with implementation of the mitigation plan.

Mitigation habitat should be equal to or exceed the quality of the habitat to be affected by the project. Baseline information would need to be gathered at the impact site to be able to quantify this goal in terms of plant species diversity, shrub and tree canopy cover, stems/acre, tree height, etc. The ultimate success of the project should be judged according to these same measurements at the mitigation site.

Criteria should be developed for assessing the progress of the project during its developmental stages as well. Assessment criteria should include rates of plant growth, plant health, and evidence of natural reproduction. Success criteria should be geared toward equaling or exceeding the quality of the highest quality habitat to be affected. In other words, the mitigation effort would be deemed a success in relation to this goal if the mitigation site met or exceeded habitat measurements at a "model" site (plant cover, density, species diversity, etc.).

The plan should present the proposed ground elevations at the mitigation site, along with elevations in the adjacent areas. A comparison of the soils of the proposed mitigation and adjacent areas should also be included in the plan, and a determination made as to the suitability of the soils to support habitats consistent with the mitigation goals.

Because wetland ecosystems are driven by suitable hydrological conditions, additional information must be developed on the predicted hydrology of the mitigation site. The plan should describe the depth of the water table, and the frequency, duration, areal extent, and depth of flooding which would occur on the site. The hydrologic information should include an analysis of extreme conditions (drought, flooding) as well as typical conditions.

The plan must include a timeframe for implementing the mitigation in relation to the proposed project. We recommend that mitigation be initiated prior to the onset of construction. If there will be a substantial time lag between project construction and completion of the mitigation, a net loss of habitat values would result, and more mitigation would be required to offset this loss.



Generally, monitoring of the mitigation site should occur annually for at least the first five years, biennially for years 6 through 11, and every five years thereafter until the mitigation has met all success criteria. Remediation efforts and additional monitoring should occur if success criteria are not met during the first five years. Some projects will require monitoring throughout the life of the project. Reports should be prepared after each monitoring session.

The plan should require the preparation of "as-built" plans. Such plans provide valuable information, especially if the mitigation effort fails. Similarly, a "time-zero" report should be mandated. This report would describe exactly what was done during the construction of the mitigation project, what problems were encountered, and what corrections or modifications to the plans were undertaken.

The plan should detail how the site is to be maintained during the mitigation establishment period, and how long the establishment period will be. It will also be important to note what entity will perform the maintenance activities, and what entity will ultimately own and manage the site. In addition, a mechanism to fund the maintenance and management of the site should be established and identified. A permanent easement should be placed on the property used for the mitigation that would preclude incompatible activities on the site in perpetuity.

Finally, in some cases, a performance bond may be required as part of the mitigation plan. The amount of the bond should be sufficient to cover the costs of designing and implementing an adequate mitigation plan (and purchasing land if needed) should the proposed plan not succeed.

## Reference

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deepwater habitats of the United States. FWS/OBS-79/31. U.S. Fish and Wildlife Service, Washington, D.C. 103 pp.

Jane  
Smith

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SEP 22 1997

City Clerk's Office

September 18, 1997

Mayor Ed Henderson  
City of Napa

Dear Ed,

I attended the scoping session on the EIR for the proposed Stanly Ranch subdivision last night and because I hope the development will end up being a winery and vineyard in keeping with the agricultural use of the Carneros area, I enlist your help with the following:--

The planner who spoke about what the EIR will contain said that four (4) alternatives will be explored to the proposed development .

As you will see by the enclosed attachment they are (1) no development (2) an all-resort (3) a mitigated alternative with on-site waste water system and (4) agriculture only program.

We were assured verbally that the same criteria will be applied to each of these four alternatives as will be applied to the total proposed development but in the Notice of Preparation paragraph (2), it says that alternatives (1) and (4), no development and agriculture only, will be done in text form ONLY and without a graphic site plan.

Would you please request the authors of the EIR to give FULL SCALE, equal consideration to alternatives (1) and (4)? It appears they might be short changed.

Thanks for your help with this.

Best wishes in your new career as Mayor. I know of course that you will do a good job and I hope you find time to enjoy it as well.

Jane Smith



238 Hartson St.  
Napa, CA 94559  
707 226-6221

B-56

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City of Napa  
Planning

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### Task A. Alternatives Analysis

The Brady and Associates/LSA team will evaluate four alternatives to the proposed project, which will include:

- The CEQA-required No Project Alternative;
- An All-Resort Alternative;
- A Mitigated Alternative with On-Site Wastewater System; and
- An Agriculture Only Alternative.

The resort and residential alternatives previously developed by ROMA Design Group are assumed to provide the data and site plans necessary for evaluation of these two alternatives. However, we would want to discuss this issue in more detail with City staff prior to undertaking this section of the EIR. Brady and Associates/LSA will formulate the No Project and Agriculture Only Alternatives in a text format only, without a graphic site plan. The Agriculture Only Alternative is assumed to be based in part on analysis of continued and expanded grape growing on the site. A study by an agricultural specialist regarding viticultural potential will be completed under the direction of Brady/LSA. A scope of work for this study will be provided after contract negotiations are complete. A budget allowance of \$5,000 has been included for this study.

In addition, Brady and Associates/LSA will design, map and evaluate a "sub-alternative" of providing a pedestrian trail at the edge of the upland adjacent to the lowland near the five-foot contour line. We will explore whether part of the trail could be part of the existing railroad bed. We will focus our evaluation on wetlands, biotic, safety, open space and access impacts, and on the impacts of the trail on the attainment of project objectives.

According to the CEQA Guidelines, alternatives can be evaluated in less detail than the project, so the analysis in this EIR will be at a qualitative level. However, alternatives are often one of the key issues of community concern. Therefore, the discussion will be of sufficient detail to evaluate the benefits and drawbacks of each alternative, and some detailed qualitative conclusions regarding the alternatives, particularly in controversial areas such as traffic generation, will be provided. If the City desires a quantitative analysis to be completed for traffic generation by various alternatives, we would require a change in the proposed scope of work. The Environmentally Superior Alternative will be identified as required by CEQA.



September 18, 1997

Re: Stanly Ranch Scoping

Attention *Ed Henderson,*

I would like to bring to your attention the recent scoping session held by the City Planning Department on September 17 at 7:00 p.m.. This session was held for the public to view the upcoming EIR on the Stanly Ranch..

↑  
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City of Napa  
Planning

Some major concerns first with the process of the Specific Plan on the Stanly Ranch.

- ⇒ The draft general plan (DGP) has not been adopted- there has been public concern about the (DGP) proposed land use changes (on the Stanly Ranch) from **open space** and **study area** to what staff has changed to **residential etc.** We are being asked to look at zoning changes that have not been adopted in the DGP.
- ⇒ The Citizen's Advisory Committee (CAC) that met for two years to study and make recommendations to the City about the DGP 2020 released a document in May of 1993 entitled, Concept Report. This document has two major scenarios that the City was to consider in their planning for the next 30 years. I refer you to that documents (see attached). On the map and on page 48 the CAC advises that the Stanly Ranch lands remain in open space/agriculture.

To address the Specific Plan directly:

- ⇒ It will put over 1,000 residential homes, 109,314 sq ft of commercial/industry, and 18 hole golf course next to historic wetlands, and sensitive uplands and this is too much growth. Recent polls indicate that growth is a current major concern for many.
- ⇒ It will add extensive runoff to the Napa River - across from significant industrial development in Corp. Park. There are vague run off plans for these developments. This affects everyone who lives in the Valley watershed. We must address this issue as flooding is the number one issue in the Valley.
- ⇒ If we do not look responsibly and strategically at development we will put any flood control management project in obsolescence.
- ⇒ This project will set a precedent for expensive sprawl creating a scenario for infill
- ⇒ The Stanly Ranch is outside the sphere of influence

**There are other major concerns to be discussed later but I would like to ask you to request that your staff fully inform you of alternate options for this land.**

**Example: openspace/agriculture , or possibly resort only.**

Thank you,

*Chris Malan*

Chris Malan

Comments  
rec'd by 9:26  
-11/5

**AGENDA**  
**PUBLIC SCOPING MEETING**  
**for Stanly Ranch EIR**  
September 17, 1997, 7 p.m.  
Napa City Council Chambers



- 7:00 Welcome and Introductions
- 7:10 Meeting Purpose and Objectives
- 7:15 Stanly Ranch Project Description
- 7:25 Environmental Impact Report (EIR) Proposal  
How Public Comments will be Used
- 7:35 Public Comments on Content and Scope of EIR Proposal

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**COMMENTS FORM**

I think the Stanly Ranch EIR should include or discuss the following:

1. The impact of commercial, resort, and residences on the  
gateway to Napa Valley will change the agricultural open  
space for us, the tourists visitors and diminish agriculture  
into a comercial venture. Surrounding property owners will  
-over-  
I'd like to be added to the city's mailing list for future Stanly Ranch notices (name /address)

X Sarah and John Stephens 348 Minahen St., Napa, Ca. 94559

Please return this evening or mail to Napa Planning Department, PO Box 660,  
Napa, CA 94559-0660 Thank you!

Comments must be received by 5 pm, October 2, 1997.  
Other Questions? call 257-9530, ask for Jean Hasser

Public Scoping Meeting for Stanly Ranch cont.

want to develop also. Urban sprawl however disguised by eucalyptus trees, is still urban sprawl.

2. This project will create between 200 and 250 mostly low income jobs requiring more social services and low income housing other than the 54 employee housing units at the site which only partially addresses the problem. Napa wants high paying jobs not jobs that perpetuate poverty and struggle and burden city and county treasuries.

3. Lacking in the EIR proposal is a view from the Cuttings Wharf terminal area looking N. Eastward toward Home Hill.



September 10, 1997



Ms. Jean Hasser  
City of Napa  
1600 First Street  
P.O. Box 660  
Napa, CA 94559



Dear Ms. Hasser:

**Re: Notice of Preparation of a Draft Environmental Impact Report  
Comprehensive Revision of the Stanly Ranch Specific Plan EIR**

Thank you for the opportunity to review the Draft Environmental Impact Report (DEIR) for the Comprehensive Revision of the Stanly Ranch Specific Plan EIR.

Information provided in the NOP, will allow Pacific Gas and Electric Company (PG&E) to assess whether the revised General Plan will have any direct impacts on our gas and electric facilities. However, since PG&E has an obligation to provide the public with a reliable and safe energy supply as mandated by the California Public Utilities Commission (CPUC) and to comply with the guidelines outlined in General Orders 95 and 112. PG&E should be consulted during the development of the project plans to ensure that the operational and maintenance requirements for its gas and electric facilities are taken into consideration prior to approval of the final plans.

Early involvement will allow us to assess cumulative impacts to our systems and to identify facilities which may need to be relocated and or realigned as a result of the proposed project. Because relocations require long lead times and are not always feasible due to engineering and operational constraints, we encourage you to consult with us during the initial stages of your planning process. If relocations of gas and electric facilities are required, the project developer is responsible for those costs. Sufficient lead time should also be allowed for utility engineering and construction.

We would like to note that expansion of utility facilities is a necessary consequence of growth and development. As development occurs, the cumulative impacts of new energy load growth use up available capacity in the utility system. In addition to adding new distribution feeders, the range of electric system improvements needed to accommodate growth may include upgrading existing substations and building new substations and interconnecting transmission line. Comparable upgrades or additions would be required for our gas system as well. Environmental impacts associated with new and or relocated gas or electric facilities as a result of the proposed project should be fully addressed in the Final EIR and, if appropriate, mitigation measures to minimize or eliminate such impacts should be incorporated into the document as well.

Developers will be responsible for the costs associated with the relocation of existing PG&E facilities to accommodate their proposed development. Because facilities relocation's require long lead times and are not always feasible, developers should be encouraged to consult with PG&E as early in their planning stages as possible. Attached is a copy of a letter sent to Mr. Tom Kambe of Stanly Ranch with a list of concerns that PG&E needs to have addressed.

PG&E remains committed to working with the City of Napa to provide timely, reliable and cost effective gas and electric service to the City. Please contact Brad Harris (707) 577-7270 if you have any questions regarding our comments. We would also appreciate being copied on future correspondence regarding this subject. Please direct all future correspondence to:

Richard A. Gigliotti  
Land Rights Office Supervisor  
111 Stony Circle  
Santa Rosa, CA 95401

Sincerely,

A handwritten signature in cursive script that reads "Brad Harris".

Brad Harris  
Land Agent

January 14, 1997



File: 606 / 0132173437  
Vaca - Adobe 220 KV &  
Vallejo - Petaluma Gas Line  
Design Problems

Mr. Tom Kambe  
Stanly Ranch  
1451 Stanly Lane  
Napa, CA 94558

Dear Mr. Kambe:

As you may know PG&E maintains several facilities crossing your proposed development in the vicinity of Stanly Road in Napa.

After review of the map showing your proposed development in relation to the location of PG&E's facilities, there are several potential conflicts that should be addressed.

1. The gas line (on the southerly portion of the project) is within an easement granted by virtue of the deed from Jerome C. Draper and others to PG&E dated August 10, 1954, and recorded in Book 503 of Official Records at page 305, Napa County Records, copy attached (PG&E's Document No. 2405-04-0338). The current design of Subdivision "D" has the gas line crossing diagonally across various lots. The subdivision must be redesigned to have the gas line run through open areas or if that is not possible the line will have to be relocated at the developers expense.
2. The golfing green (on the southerly portion of the project) also within said easement from Jerome C. Draper and others to PG&E dated August 10, 1954, should be moved to avoid having the golf green lying directly on top of the existing gas line. If you choose not to move the green you must realize that P.G.&E. reserves the right to properly maintain its facility, which could result in future inconveniences for your golf course.
3. Any redesign of the project should also keep in mind that P.G.&E. must have adequate access to properly maintain their facilities.
4. Any relocation of a P.G.&E. facility necessitated by this development will be at the developers expense.
5. The proposed golf course in the project should not cross existing overhead transmission line(s) to eliminate the possibility of a golf ball being hit into conductors or insulators.



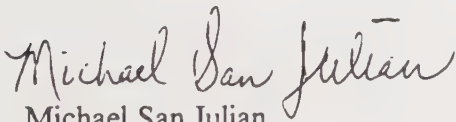
Mr. Tom Kambe  
January 14, 1997  
Page 2

6. Deep rooted trees or shrubs should not be planted over any existing gas line(s) and there should be no trees which grow to a height in excess of 20 feet at maturity planted under overhead transmission or distribution lines.

7. When your development plans are available please provide them to this office for P.G.&E.'s review.

If you have any questions please call me at (707) 577-7273.

Sincerely,

  
Michael San Julian  
Land Agent

MSJ/jeb

Attachment

bc: Joe Hemstock

# California Native Plant Society

September 17, 1997

Jean Hassler  
City of Napa Planning Department  
1600 First St.  
P.O.Box 660  
Napa, CA 94559



Re: Stanly Ranch Specific Plan EIR.

I have received a copy of the 'Notice of Preparation' for the above listed project as a representative of the Napa Valley Chapter of the California Native Plant Society. As an organization which is "dedicated to the preservation of California native flora, we see this project as certain loss of undeveloped grasslands and wetlands. We would like to recommend for inclusion in your environmental review process the following considerations.

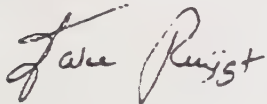
1. This most recently submitted project design includes 704 acres of open space (this will be discussed further under point 2). If no project is approved, how much open land will be protected from other forms of development, particularly agricultural conversion? Agriculture has the potential to disturb a greater percentage of this valuable upland-wetland ecotone.
2. The guarantee of 704 acres of open space includes 179 acres of golf course which is no more open space than a residential landscape. This is located adjacent to wetlands, apparently eliminating the wetland/upland ecotone. What impacts will chemical runoff and drift have on the wetland vegetation? How much will wetland values decrease. What is the current recommendation on a buffer or setback to preserve this community. Does the design provide an appropriate buffer.
3. The design also claims to retain 83 acres of upland open space. This is proposed to be used as vineyard. This is not truly open space as it involves ripping and/or grading and displaces most native plants and animals. Has the development of open grassland within Napa Valley reached a level of significance yet? Very little of this community is under protection from conversion. Will any upland be left untouched within the project area. If not then how is this justified given that wetland and upland organisms depend on each other.
4. Almost 40 acres of the site is scheduled to be covered with asphalt roads. This is included



as part of the open space. What habitat values does this open space provide. What impacts will the change in hydrologic patterns and petroleum runoff have on the wetlands designated for protection?

5. The remaining 440 acres of open space are wetlands. Historically this area was covered by tidal marsh but has for many years been diked and utilized as pasture. This area has potential for restoration to tidal marsh which would improve habitat value. Does the current plan seek to restore any of the historic wetland qualities? Does the project pose any negative influence on potential future marsh enhancement within the area.

Sincerely,

A handwritten signature in cursive script that reads "Jake Ruygt".

Jake Ruygt  
Conservation Chairman,  
Napa Valley Chapter, C.N.P.S.  
3549 Willis Drive  
Napa Ca 94558





# NAPA COUNTY

## CONSERVATION, DEVELOPMENT and PLANNING DEPARTMENT

Jeffrey Redding  
Director

1195 Third Street, Room 210 • Napa, CA 94559-3092  
Telephone 707/253-4418 FAX 707/253-4336

September 26, 1997

Jean Hasser  
City of Napa Planning Dept.  
1600 First Street PO Box 660  
Napa, CA 94559

RE: Response to Notice of Preparation of Draft EIR  
Stanly Ranch Specific Plan Applicant: Carneros Valley Investors  
APNs 47-230-05, 47-230-010 through 015; 47-262-001

Dear Ms. Hasser:

We have received the Notice of Preparation of the Draft EIR for the Stanly Ranch Specific Plan and upon review of same we are submitting our comments.

It is noted that the scope of the EIR will include the review of several potentially significant impacts with which we concur, however, there are additional impacts which should be addressed:

1. Land Use. Surrounding land uses will be described in the EIR in the context of overall local land use trends in southwestern Napa. This description should also include the land use trends in the unincorporated areas within the one-half mile radius of the site, as well as the commercially zoned parcels in the unincorporated area as indicated on the attached map.
2. Transportation and Circulation. The existing service level of the Golden Gate/Foster Road and Foster Road/Old Sonoma Road intersections should be included in the EIR analysis. These intersections will be part of the routes taken by new residents for local day-to-day service needs.
3. Visual Quality. The existing eucalyptus windrows are considered a dominant visual feature and "screening" for this development. The health of these trees should be evaluated and a management and replacement program developed to ensure that the visual feature is maintained.

4. Trails. The project description incorrectly assumes that the "Bay Trail" proposed would connect to a designated or likely route in the unincorporated County. The EIR will need to more realistically assess pedestrian opportunities.
5. Growth Inducement. There may be more of a demand for day-to-day commercial services in closer proximity to the project than that proposed. An analysis of potential in-fill growth inducement demands within the area in proximity to the city and the project should be included. Our concerns are specifically the commercially-zoned parcels near the project and the 4 acre "Pumpkin Patch" site, which, for example, might be potentially developed into a major produce center or winery.
6. Alternatives Analysis. The mitigated alternative with on-site wastewater system should include an evaluation of the location of the processing facility and the pond location and resultant impacts. Its location near the Napa River should fully address possible failure in the system (i.e. seismic event, flooding) and mitigation measures to ensure that the river does not receive any partially processed materials and solutions if such an event occurs.
7. Cumulative Impacts: The analysis should include both planned City of Napa and Napa County buildout for the area, in addition to present and "reasonably foreseeable future" projects. In addition, under traffic impacts, the increase in background traffic should be included, especially due to high through-traffic on 12/121.

Thank you for the opportunity to comment on this Notice of Preparation and we request the opportunity to review the Draft Environmental Document.

Sincerely,



Michael Miller  
Deputy Director

cc: Jeffrey Redding, Director  
Robert Westmeyer, County Counsel  
Sylvia Toth, Supervising Planner



Unincorporated Area  
Commercial zoning



 = Stanly Ranch

Napa County Airport Plans and Impact Assessment / Chapter 5

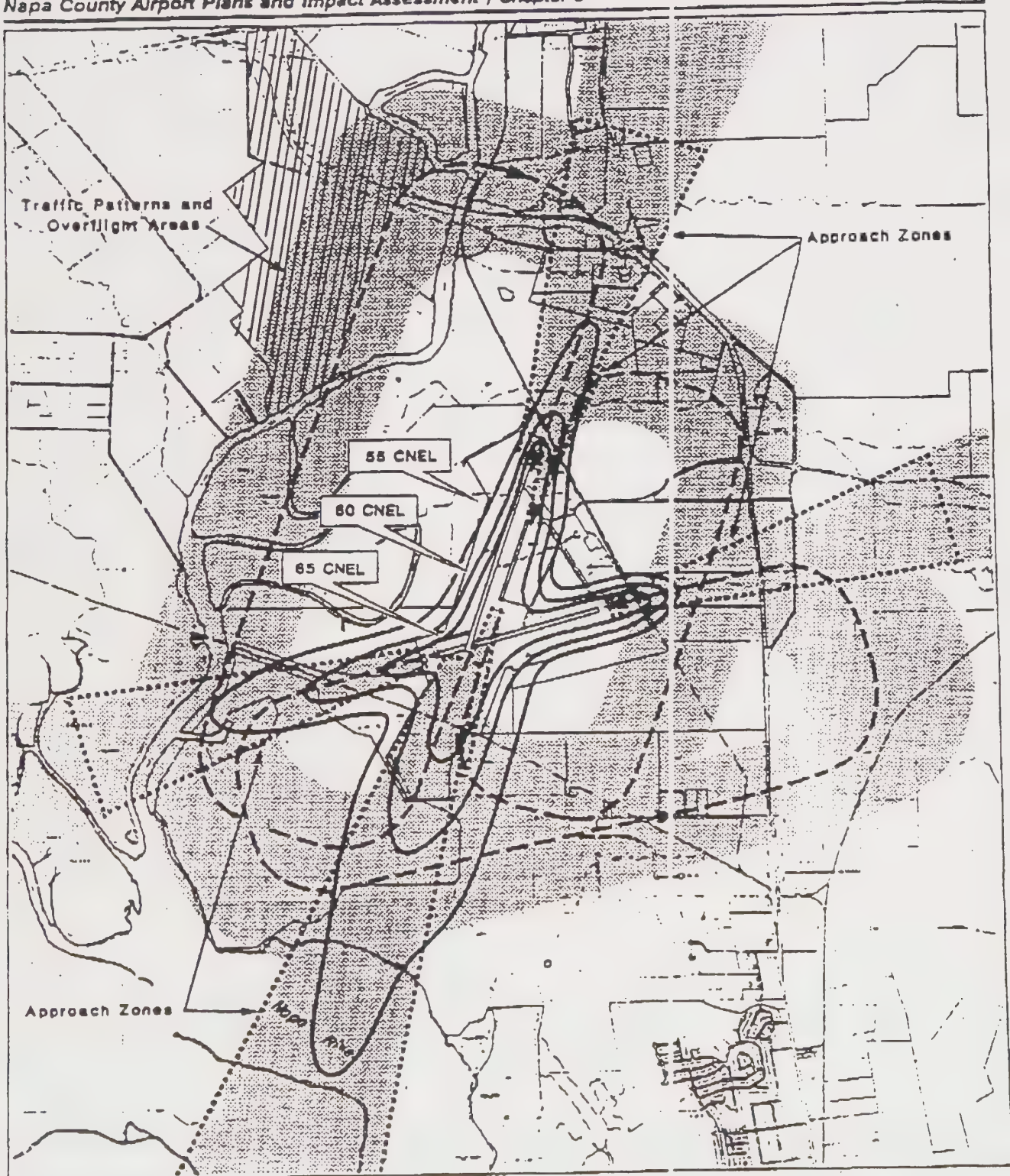


Figure 5C

**Airport Impact Areas**  
Napa County Airport

**ACTIVITY REPORT  
NAPA COUNTY AIRPORT  
TOTAL OPERATIONS**

CY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL	AVERAGE % CHANGE
1985	8,765	10,232	8,264	11,892	13,076	12,255	11,558	12,129	10,847	11,476	9,209	8,434	122,237	
1986	7,305	8,169	12,039	11,194	13,424	13,125	12,015	12,577	11,052	11,785	12,787	7,010	132,462	8.36%
1987	8,845	9,320	10,648	12,073	12,272	14,530	12,416	13,282	12,975	12,875	13,816	8,409	141,261	6.64%
1988	10,358	12,759	13,875	12,014	15,611	16,319	15,114	17,258	14,300	12,370	11,488	11,493	162,957	15.36%
1989	11,738	13,704	12,940	14,527	16,873	16,913	17,810	18,081	14,166	14,142	13,736	9,746	172,378	5.78%
1990	14,418	14,581	15,188	15,655	17,003	18,124	16,730	17,585	17,135	17,587	18,688	13,440	194,134	12.62%
1991	11,936	13,539	13,124	15,015	18,651	18,767	16,041	16,284	16,138	15,708	16,846	11,491	179,540	-7.52%
1992	10,587	16,076	20,027	19,630	18,145	19,285	18,342	18,199	19,365	17,108	17,891	12,100	206,755	15.16%
1993	11,383	14,440	20,325	19,262	17,443	20,213	17,873	18,128	18,820	18,144	15,456	11,143	207,730	1.46%
1994	13,936	12,981	19,319	20,004	20,990	23,907	18,690	22,125	23,255	24,489	18,286	12,940	230,922	13.35%
1995	9,197	13,701	15,144	14,834	18,396	19,282	20,262	18,403	17,416	15,958	16,414	9,854	188,861	-18.21%
1996	11,407	10,781	15,773	15,547	15,099	17,226	16,624	14,809	12,678	12,097	11,040	7,969	161,050	-14.73%
1997													0	-100.00%
1998													0	ERR

B-71





Dedicated to Preserving the Napa River for Generations to Come

950 IMOLA AVENUE WEST  
P. O. BOX 2480  
NAPA, CALIFORNIA 94558-0522  
TELEPHONE (707) 258-8000  
FAX (707) 258-6048

October 1, 1997



Jean Hasser  
City of Napa Planning Dept.  
P. O. Box 660  
Napa, CA 94559

Re: Notice of Preparation - Stanley Ranch Specific Plan EIR

Dear Jean:

The Napa Sanitation District has reviewed the Notice of Preparation for the Stanley Ranch Specific Plan EIR. In addition to the issues outlined in the NOP, the EIR needs to address the following issues:

1. If the Napa Sanitation District Wastewater Disposal Option is chosen, a pump station would be required in order to connect to the District's facilities on the east side of the Napa River, as discussed in the NOP. Because of maintenance and operation costs associated with pump stations, it has been the District's practice in recent years to not allow any additional pump stations to be constructed within the District's collection system. The owner/developer would need to receive approval from the District's Board of Directors for the required pump station.
2. All wastewater generated within the District's boundaries is treated at the Soscol Treatment Plant. At the present time, the plant is operating near capacity and at times the capacity is exceeded. Exceedance mainly occurs during the wet weather months when flows increase due to storm water intrusion and the oxidation ponds are less effective due to reduced sunlight. The District has begun to implement various phases of a Master Plan Program that was prepared in 1988 and updated in 1990. Until the major improvements recommended in the Master Plan are completed, the District cannot guarantee that capacity will be available for future development.

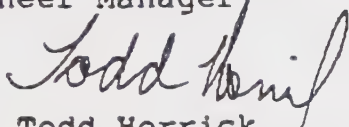


3. The District is concerned with the potential environmental impact associated with a small package sanitation plant. Issues associated with development of this plant, including formation of the District by LAFCO, shall be included in the EIR. Also to be included is the potential for the Napa Sanitation District to be requested to take over operation of this plant in the future.

If you have any questions regarding these matters, please feel free to contact me.

Sincerely,

John W. Stewart  
Engineer-Manager

A handwritten signature in cursive script, appearing to read "Todd Herrick".

by: Todd Herrick  
Engineering Technician

stanly.nop



# NAPA COUNTY

## FLOOD CONTROL AND WATER CONSERVATION DISTRICT

1195 THIRD STREET • ROOM 201 • NAPA, CALIFORNIA 94559-3092  
PHONE 707-253-4351 • FAX 707-253-4627

KENNETH H. JOHANSON  
District Engineer

October 1, 1997

Jean Hasser  
City of Napa Planning Department  
P.O.Box 660  
Napa, CA 94559

RE: Response to Notice of Preparation of Draft EIR  
Stanly Ranch Specific Plan



Dear Jean:

The Flood Control District has reviewed the Notice of Preparation for the Stanly Ranch EIR and has the following comment.

The Scope of Work indicates that shallow groundwater has little viability as a source of water for domestic or irrigation use due to its likely brackish condition. The initial study indicates that all water supply will be provided by the City of Napa and not from groundwater supplies. As a result, no study will be done of the potential impact of a draw on the groundwater supply from the project. We concur with that approach provided that the City is agreeable to providing some protection from future attempts to drill wells by the owners of the various developments that go into the specific plan area.

In the unincorporated area, the County requires that a water availability analysis be performed if groundwater is proposed as the source of water for any subdivision of land and any project that requires a Use Permit. If groundwater is not the initial source of supply but the owner wants to make it so in the future, an analysis would be required at that time. In the City, a well can be drilled on private property without such an evaluation or permit from anyone. Even though City water is available to parcels in the City, we have seen instances where, for various reasons, a property owner will drill a well to supplement City water. To guard against this occurring in the Specific Plan area, in the absence of any study of groundwater supplies, we will be asking the City to impose restrictions on well drilling for all development within the Specific Plan area until appropriate studies and evaluations are performed and a permit process is established.

Thanks for the opportunity to review the Notice of Preparation.

Very Truly Yours,

A handwritten signature in dark ink, appearing to read "R. Peterson".

Robert J. Peterson  
Deputy Director of Public Works

cc: Ken Johanson  
Robert Westmeyer

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**Appendix C**  
**ARCHITECTURAL CONCEPT DRAWINGS**  
**FOR RESIDENTIAL UNITS**

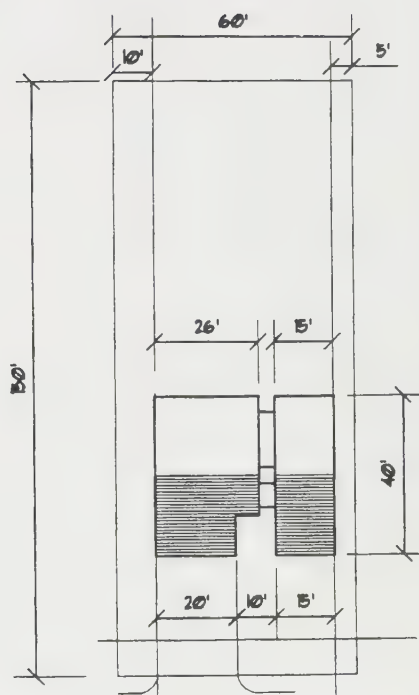
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VINEYARD HOME  
SECTION/ELEVATION



PLAN

NOTE: BUILDING ELEVATIONS AND ROOF PLANS ARE APPROXIMATE ONLY AND SUBJECT TO FURTHER REFINEMENT.

SOURCE: EDAW 1997

# STANLY RANCH

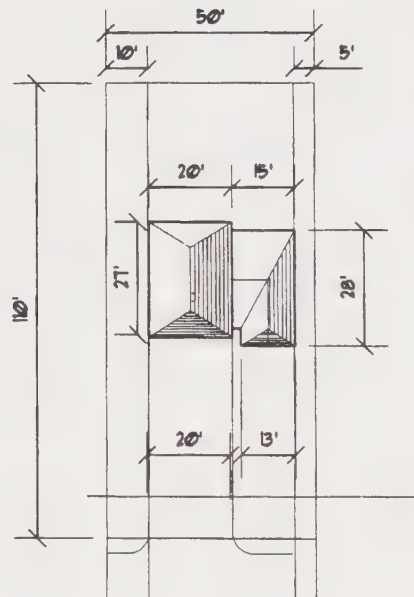
SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT

Figure C-1  
Architectural Concept for Vineyard Home

BRADY ■ LSA  
PLANNERS AND LANDSCAPE ARCHITECTS



VILLA HOME  
SECTION/ELEVATION



PLAN

NOTE: BUILDING ELEVATIONS AND ROOF PLANS ARE APPROXIMATE ONLY AND SUBJECT TO FURTHER REFINEMENT.

SOURCE: EDAW 1997.

# STANLY RANCH

SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT

Figure C-2  
Architectural Concept for Villa Home

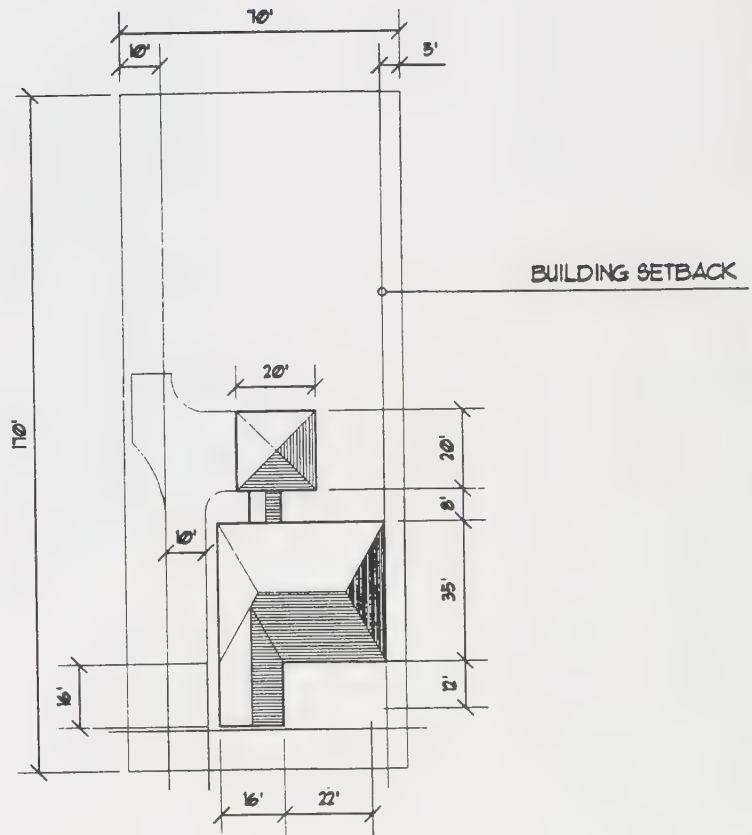
BRADY • LSA  
PLANNERS AND LANDSCAPE ARCHITECTS





CUSTOM HOME  
SECTION/ELEVATION

PLAN



NOTE: BUILDING ELEVATIONS AND ROOF PLANS ARE APPROXIMATE  
ONLY AND SUBJECT TO FURTHER REFINEMENT.

SOURCE: EDAW 1997.

# STANLY RANCH

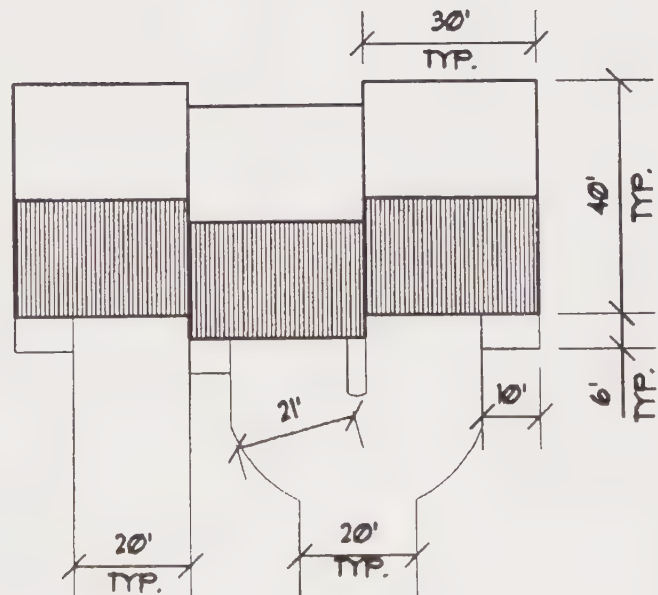
SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT

Figure C-3  
Architectural Concept for Custom Home



TOWNHOMES  
SECTION/ELEVATION

PLAN



NOTE: BUILDING ELEVATIONS AND ROOF PLANS ARE APPROXIMATE ONLY AND SUBJECT TO FURTHER REFINEMENT.

SOURCE: EDAW 1997

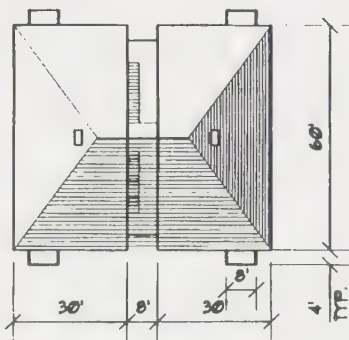
# STANLY RANCH

SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT

Figure C-4  
Architectural Concept for Town Homes



EMPLOYEE HOUSING  
SECTION/ELEVATION



PLAN



NOTE: BUILDING ELEVATIONS AND ROOF PLANS ARE APPROXIMATE ONLY AND SUBJECT TO FURTHER REFINEMENT.

SOURCE: EDRAW 1997

# STANLEY RANCH

SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT

Figure C-5  
Architectural Concept for Employee Housing





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**Appendix D**  
**TRAIL ALTERNATIVES**

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## Appendix D TRAIL ALTERNATIVES

■ ■ ■

In addition to the Project River Trail, there are two trail alternatives which have been evaluated: River Trail A (levee), and River Trail B (railroad). These trail alignments are shown in Figure D-1, and are described in Table D-1 below. The alternative trails are not part of the proposed project, but have been included for evaluation of impacts. Should decision makers elect to include either alternative in lieu of the Project River Trail, they could be expected to have the following biological and other impacts and require corresponding mitigation measures.

The following text includes: 1) an overview of the trail objectives; 2) background on public trails, generally; 3) a history of the Stanly Ranch trails; and 4) an impact overview. The section then identifies individual impacts and mitigation measures consistent with the format used elsewhere in the EIR (i.e., less-than-significant impacts are denoted by ***bold and italicized*** text).

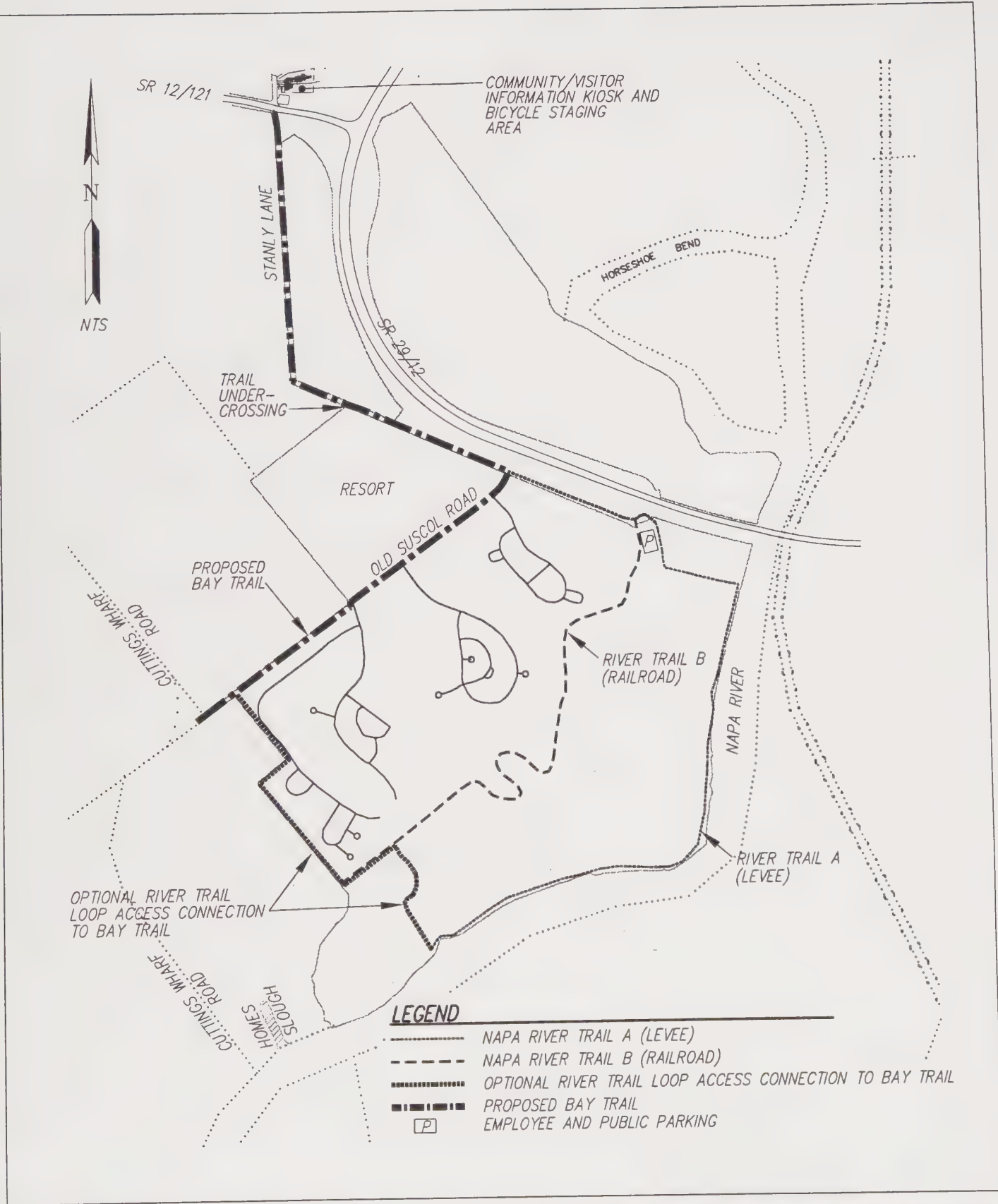
### 1. Stanly Ranch River Trail Objectives

The following are objectives for the River Trail as identified by the City of Napa.

- Per City goals and policies, provide a citywide multi-use trail along the Napa River from Stanly Ranch to Trancas Street which avoids and protects sensitive natural resources, such as wetlands;
- Per City trails recommendations, provide access to the southern marshes;
- Provide an enjoyable walking/bicycling experience;
- Provide an alignment which does not close off long-term future connections;
- Limit long-term city maintenance costs of levees;
- Complement proposed land uses through design, trail location and provision of adequate security.

### 2. Background

Public trails are increasingly popular recreational facilities for bicycling, jogging and walking. They promote community spirit by providing places for people to get out



# STANLY RANCH

## SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT

Figure D-1  
Proposed River Trail Alternatives

**Table D-1**  
**RIVER TRAIL DESCRIPTIONS**

Project-Proposed River Access Trail	River Trail A - Levee Alignment	River Trail B - Railroad Alignment
<p><b>Length:</b> 2.0 mile loop from Bay Trail plus 1.1 mile future southerly loop addition</p> <p><b>Route:</b> Trail starts where Bay Trail turns west at the Stanly Lane/Old Suscol Road intersection. The trail parallels Stanly Lane to its end at an employee/public access parking lot, crosses a drainageway, and continues to the Napa River where two loops are provided.</p> <p>One loop heads north under the southern crossing; the second heads south to the PG&amp;E access road where it turns and heads back. The trail alignment is nearly completely on upper elevation (non-wetland) lands. All but about 300 feet of the levee in this segment has broad adjacent upland areas. Eucalyptus trees line much of the riverbank levee; the trail alignment moves inland away from the trees in most areas.</p> <p><i>Southerly Trail Loop.</i> A 1.1 mile long south loop, to be implemented in the future if a direct connection to Cuttings Wharf Road becomes available, would start at the west side of the site on the historic railroad bed, turn south to follow an upland path to a broad upland area along the levee, and loop around and return to the railroad bed.</p> <p>In the interim, a private gravel path is proposed for use by project residents.</p>	<p><b>Length:</b> 2.8 mile loop from Bay Trail</p> <p><b>Route:</b> Trail starts where Bay Trail turns west at the Stanly Lane/Old Suscol Road intersection. The trail parallels Stanly Lane to its end at an employee/public access parking lot, crosses a drainageway, and then continues to the Napa River.</p> <p>For a distance of about 0.6 miles, the levee has limited to no adjacent upland areas but lies between the river and wetlands. For much of the length, the levee is lined by eucalyptus, and banks are undercut and eroded in places. At the southwest end of the property is a marsh and slough, and the westernmost levee is low and marshy. Thus, to reduce wetland impacts and to provide a loop, the trail would turn north, follow a path north to an historic railroad bed, turn west, then north along the west edge of the property back to the Bay Trail.</p>	<p><b>Length:</b> 2.2 mile loop from Bay Trail</p> <p><b>Route:</b> Trail starts where Bay Trail turns west at the Stanly Lane/Old Suscol Road intersection. The trail parallels Stanly Lane to its end, where it turns southwest along an historic railroad bed alignment, generally moving inland where necessary to avoid wetlands, and outboard where necessary to go around proposed golf course tees. It would loop back along the west edge of the property back to the Bay Trail.</p>



Table D-1 *continued*

Project-Proposed River Access Trail	River Trail A - Levee Alignment	River Trail B - Railroad Alignment
<p><b>Views:</b></p> <ul style="list-style-type: none"> <li>Initial Views: Proposed project.</li> <li>Past the parking lot: Lowlands and farmland to the southwest; southern crossing to the east with farmland beyond; the project site to northwest.</li> <li>At the river: The Napa river; Sanitation District facilities and ponds; farmlands; hills to the south/southwest; Lowlands to the north with the project beyond.</li> <li>Past the bridge on northernmost loop: Agricultural lands; industrial parts of the city and eastern hills.</li> <li>The southerly loop provides views of the river, farmlands, distant hills, and Lowlands.</li> </ul>	<p><b>Views:</b></p> <ul style="list-style-type: none"> <li>Initial Views: Proposed project.</li> <li>Past the parking lot: Lowlands and farmland to the southwest; southern crossing to the east and farmland beyond; the project site to the northwest.</li> <li>At the river: The Napa River; Sanitation District facilities and ponds and farmlands; hills to the South/Southwest; Lowlands to the north with the project site beyond.</li> <li>At west edge of site: Farmlands to the west; proposed project homes to the east.</li> </ul>	<p><b>Views:</b></p> <ul style="list-style-type: none"> <li>Initial Views: Proposed project.</li> <li>Once the path turns south: Lowlands and trees along the Napa River to the south, with farmlands, Sanitation District facilities and ponds beyond; the southern crossing, open land and hills to the east; proposed adjacent golf course and homes to north.</li> <li>At west edge of the site: Farmlands to the west; proposed project homes to the east.</li> </ul>
<p><b>Off-Site Connections:</b> Link to City and County is by proposed Bay Trail.</p> <p>Allows possibility for future direct connection through private, unincorporated lands to Cuttings Wharf Road</p>	<p><b>Off-Site Connections:</b> Link to City and County is by proposed Bay Trail.</p> <p>No off-site link at the south levee end of property is planned or likely; lands are privately owned. A large marsh, Holmes Slough, and homes lie between south end of site and Cuttings Wharf.</p> <p>Allows possibility for future direct connection through private, unincorporated lands to Cuttings Wharf Road.</p>	<p><b>Off-Site Connections:</b> Link to City and County is by proposed Bay Trail.</p> <p>Allows possibility for future direct connection through private, unincorporated lands to Cuttings Wharf Road.</p>

and meet each other (San Diego Tribune, 1998). They link neighborhoods and the community together. A recent Sonoma County survey of residents living near parks and trails found respondents are generally very satisfied with being a park or trail neighbor and that the impact is much more favorable than residents had anticipated. (Sonoma County Regional Parks, 1997). Recent comprehensive surveys of 372 trails, as well as some earlier studies find that they are not crime generators and that they have neutral impacts on property values of adjacent properties (Tracy and Morris, 1998 and Seattle Engineering Department, Office for Planning, 1987). Nevertheless, trail operators recognize the importance of incorporating safety and preventative measures into trail design and management.

### **3. Stanly Ranch River Trail History**

The Citywide Trails Plan identifies a schematic alignment of a River Trail through Stanly Ranch, with connections to the north along Golden Gate Drive, and to the west through private property. Preliminary investigations with California Department of Fish and Game staff in 1993 identified potentially adverse biological impacts, and City staff also had concerns about ongoing high public costs of levee maintenance with a river levee alignment; thus, a historic railroad bed alignment near the edge of the river lowlands was considered as a possible alternative alignment. The *Draft Stanly Ranch Specific Plan (Draft SRSP)* and EIR was to evaluate details of various alignments. For this reason, the applicant-proposed River Trail has been evaluated, as well as a river levee (River Trail A) and railroad bed alignment (River Trail B).

### **4. Impact Overview**

The Project River Trail generally satisfies identified objectives. It provides public access to and along the Napa River, but limits levee maintenance costs for the site's levees. It is located on uplands to avoid wetland impacts and to avoid sensitive species habitat. Along much of the route, there is adequate upland width to provide 100-foot or more trail setbacks and landscape buffers.

The River Trail A (levee) alignment results in potentially greater impacts on sensitive species and higher levee maintenance costs than the Project River Trail or River Trail B (railroad). Given the more extensive potential impacts on sensitive species, approval of the River Trail A alignment by the Corps of Engineers (COE), in consultation with the U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Game (CDFG), could be problematic when other reasonable alternatives are possible.

River Trail B (railroad) does not meet the goal of providing direct access to the Napa River, and causes design problems to the project due to crossing areas of proposed golf holes.

A summary of trail alternatives' impacts is provided in Table D-2 and described in more detail below.

## 5. Impacts and Mitigation Measures

The following are the identified impacts for the River Trail A and River Trail B alignments (see Figure D-1). Mitigation measures are recommended for each potentially significant impact. When impacts are less than significant but include Conditions of Approval, the impact is ***bolded and italicized***.

**Impact BIO-D1: The River Trail A (levee) alignment could result in fill of an estimated 0.15 acres of wetlands, and has the highest potential of the three alignments for additional fill as a result of levee reconstruction or maintenance.**  
**(S)**

About 0.02 acres of fill could occur in the initial trail connection through the South Lowlands where it crosses a wetland area. Additionally, a loop connection back to the Bay Trail along the western property boundary near Neighborhood 4 could result in fill of an estimated 0.12 acres where it crosses three wetland areas.

Additional fill could occur based on an anticipated need to reconstruct and/or repair portions of up to 3,300 linear feet of levee which are narrow and abut the river and wetlands on both sides. Such work would be required to be done in consultation with the CDFG, National Marine Fisheries Service, USFWS, and the COE.

Mitigation Measure BIO-D1a: The impact to wetlands from River Trail A in its initial northern connection through the South Lowlands area shall be minimized by a design that minimizes fill.

Mitigation Measure BIO-D1b: The loop access connection to the Bay Trail along the property's western edge shall be routed around the wetland area, or, if it cannot be routed around the wetland area, the trail shall be constructed on piers through the wetland area.

Mitigation Measure BIO-D1c: Fill of wetlands shall be minimized during repair or reconstruction of the levee, if this alignment is selected. Repair of the levee shall be done in consultation with the CDFG, National Marine Fisheries Service, USFWS, and the COE.

Mitigation Measure BIO-D1d: A Wetland Mitigation Plan based on the Conceptual Wetland Mitigation Plan (April, 1998) shall be created and approved by the COE prior to approval of a grading plan for this trail. At a minimum, the Wetland Mitigation Plan shall identify the following goals and objectives: location and size of all wetland fill; location and size of



**Table D-2**  
**IMPACTS SUMMARY FOR TRAIL ALTERNATIVES**

Project River Access Trail	River Trail A (Levee)	River Trail B (Railroad)
<ul style="list-style-type: none"> <li>Limited wetland fill.</li> <li>Repair or construction of levee or trail construction could result in impacts to Mason's lilaeopsis over about 250 feet of levee distance.</li> <li>Repair or construction of levee or trail construction could result in impacts to sensitive species burrows or nests.</li> <li>Repair or construction of levee or trail construction could result in impacts to several sensitive fish species in Napa River; however, significant setbacks from edge of river are possible most of the levee distance in the northern and southern loops to reduce impact potential.</li> <li>Potential sedimentation during trail construction.</li> <li>Human activity/pets may affect sensitive wetlands.</li> <li>Eucalyptus tree habitat loss.</li> <li>Levee maintenance costs.</li> <li>Potential impact to salt marsh harvest mouse habitat near southwestern edge for future southerly loop.</li> </ul>	<ul style="list-style-type: none"> <li>Limited wetland fill; however, would have highest potential (among three alignments) to result in added fill along the levee for trail construction or levee reconstruction/maintenance.</li> <li>Repair or construction of levee or trail construction could result in impacts to Mason's lilaeopsis over about 1.2-mile levee distance.</li> <li>Repair or construction of levee or trail construction could result in impacts to sensitive species nests or burrows.</li> <li>Repair or construction of levee or trail construction could result in impacts to several sensitive fish species in Napa River.</li> <li>Potential sedimentation during trail construction.</li> <li>Human activity/pets may affect sensitive wetland areas.</li> <li>Potential loss of eucalyptus habitat.</li> <li>Potential limited land use conflicts.</li> <li>Potential safety hazards to users.</li> <li>Highest levee maintenance costs.</li> <li>Potential impacts to salt marsh harvest mouse habitat on railroad levee near southwestern edge.</li> </ul>	<ul style="list-style-type: none"> <li>Limited wetland fill.</li> <li>In some segments, disturbance to non-native grassland adjacent to South Lowlands could result in impacts to salt marsh harvest mouse habitat.</li> <li>Potential impacts to salt marsh harvest mouse habitat at southwestern edge of trail.</li> <li>Potential sedimentation during trail construction.</li> <li>Human activity/pets may affect sensitive wetland areas.</li> <li>Potential limited land use conflicts.</li> <li>Potential golf safety hazards.</li> <li>Potential design conflicts with proposed project.</li> </ul>

mitigation areas; planting plans and site preparation specifications; an implementation and monitoring plan; the management organization responsible for the plan; and, cost estimates sufficient to cover the cost of implementing and maintaining the wetlands. This Plan shall also identify methods of wetland creation and types of wetlands to be created. All mitigation shall occur on-site at a minimum 1:1 ratio; higher mitigation ratios are encouraged. Preferred mitigation areas include conversion of uplands to lowlands in the North and South Lowlands, and removal of fill from railroad crossings to improve wetland connections. Performance standards shall include: 1) criteria for evaluating whether goals of the Wetland Mitigation Plan are being achieved over time; 2) plant cover values; and, 3) the provision that the mitigation wetlands be dominated by native species. Cocklebur (*Xanthium strumarium*), spiny clothbur (*Xanthium spinosum*), broad-leaved pepper-grass (*Lepidium latifolium*), and any other noxious weed shall not comprise more than 10 percent of the cover of the mitigation wetlands. The Wetland Mitigation Plan shall also include monitoring for five years. (LTS)

**Impact BIO-D2: River Trail B (railroad) could result in fill of an estimated 0.12 acres of wetlands and, depending on the final alignment, could potentially affect other wetland areas. (S)**

A loop connection back to the Bay Trail along the western property boundary near Neighborhood 4 could result in fill of an estimated fill of 0.12 acres of wetlands where it crosses three wetland areas.

Mitigation Measure BIO-D2a: Mitigation Measures BIO-D1b and BIO-D1d shall be implemented.

Mitigation Measure BIO-D2b: The final trail alignment shall avoid additional wetland fill impacts if at all possible.

Mitigation Measure BIO-D2c: The final trail alignment shall avoid additional wetland fill impacts if at all possible. (LTS)

**Impact BIO-D3: River Trail A and River Trail B would result in indirect impacts to wetlands. An indirect impact would consist of sedimentation during construction. The proximity of people to the wetlands of the North and South Lowlands also results in reducing habitat value for wildlife. (S)**

People would approach the Lowlands wetlands from either trail alignment alternative. The proximity of people and (potentially) their pets to the wetlands on the Stanly Ranch would reduce the value of those wetlands to wildlife. While trail design (fencing, buffer landscaping) and operating rules can significantly reduce pet

disturbance of wildlife habitat, buffers may not be possible or desirable in every trail segment, and adherence to rules is never 100 percent.

The following combination of mitigation measures shall be implemented.

Mitigation Measure BIO-D3a: A 100-foot (+) buffer shall be maintained between the edge of golf course landscaping/any golf course edge trail and South Lowland wetland areas for at least 90 percent of the length of the golf course. For 10 percent of this length, reductions may be approved by the California Department of Fish and Game in exchange for added landscaping or other enhancements but in no case shall it be less than 50 feet. The buffer area shall be a component of the site's natural open space and shall be designed to function as wildlife habitat; people shall be excluded from the buffer area.

The buffer shall be planted with trees and shrubs to screen people from the wetlands and provide cover for wildlife escaping the lowland areas during flooding. Suitable trees would include those native trees already growing on the Stanly Ranch. These species include coast live oak, black oak, valley oak, black walnut, and California buckeye. Suitable shrubs include snowberry (*Symphoricarpus albus*) (if beneath the tree canopy), California rose (*Rosa californica*), California lilac (*Ceanothus thyrsiflorus*), coffeeberry (*Rhamnus californica*), coyote brush (*Baccharis pilularis*), red berry (*Rhamnus crocea*), toyon (*Heteromeles arbutifolia*), California blackberry (*Rubus ursinus*), and Eastwood's manzanita (*Arctostaphylos glandulosa*). Herbaceous species, such as fathen, shall be planted at the margin of the wetland to further increase the cover of the vegetation and increase the effectiveness of the vegetational screen for wildlife (especially salt marsh harvest mice).

Mitigation Measure BIO-D3b: The proposed Napa River Trail B (railroad) shall be located at the extreme landward side of the buffer in order to maintain maximum distance between people (and their pets) and the wildlife of the wetlands.

Mitigation Measure BIO-D3c: The River Trail A (levee) shall provide buffer native landscaping wherever possible to reduce impacts of human intrusion on wildlife habitat. Buffer plants shall be selected from the list above or similar appropriate native species and shall be matched with proper site and planting conditions.

Mitigation Measure BIO-D3d: The River Trail A (levee) shall be located inland from the edge of the levee where possible in order to provide a buffer between people (and their pets) and the wildlife of the wetlands/river.



Mitigation Measure BIO-D3e: In an appropriate location or locations, signs shall explain the sensitive nature of the wetlands, the importance of staying on the designated trail, and the role of buffer plantings.

Mitigation Measure BIO-D3f: Trail operating rules shall prohibit dogs or require that dogs be kept on a leash.

Mitigation Measure BIO-D3g: Both trail alignments include a connection back to the Bay Trail along the western edge of the property near Neighborhood 4 which would potentially run through three wetland areas. If the trail is relocated around the wetland areas, as recommended, a vegetative screen shall be planted between the River Trail connection to the Bay Trail along the western edge of the property and adjacent wetlands. Species mentioned in Mitigation Measure BIO-D1d above shall also apply to this mitigation measure. Additional vegetation types may be included in upland areas to provide the required agricultural buffer described in the Section IV.A, Land Use.

Mitigation Measure BIO-D3h: Mitigation Measure HYDRO-2 shall be implemented to reduce trail construction sedimentation impacts. Because the water quality impacts to receiving waters cannot be guaranteed to be less than significant after mitigation, this impact would remain potentially significant. (PS)

**Impact BIO-D4: Impacts could occur to salt marsh harvest mice present in the South Lowland from portions of River Trail B (railroad) due to increased human activity. (S)**

Direct impacts to salt marsh harvest mice present in the South Lowlands portion of the site could result from disturbance to upland, non-native grassland adjacent to the South Lowlands area. This grassland provides cover during extreme flood events.

People and pets (predators of salt marsh harvest mice) would have access to upland habitat of the salt marsh harvest mouse by the proposed Napa River Trail B. This access would increase predation of salt marsh harvest mice and result in increased disturbance to the mice. The population of salt marsh harvest mice at the site is likely to be small because its habitat becomes flooded for a month or more each year. The small number of specimens captured during surveys provides further evidence of the small size of this population. An increase in disturbance and predation could result in the extirpation of this population.

Mitigation Measure BIO-D4a: Mitigation Measure BIO-2b (see Chapter IV.F) shall be implemented. The required buffer shall provide sufficient cover to hide salt marsh harvest mice especially when their habitat is flooded for a month or more during the winter.

Mitigation Measure BIO-D4b: Portions of the path near salt marsh harvest mice upland habitat (golf holes 11 and 13) shall be developed and fenced to maintain the greatest buffer width possible but no less than 100 feet between the path and wetlands. Signs shall be posted to explain the sensitive nature of wetlands, the nearby presence of salt marsh harvest mice, the importance of the buffer, and the role of buffer plantings.

Mitigation Measure BIO-D4c: The trail alignment shall be revised in the southwestern corner of the railroad bed to trend northwesterly to avoid wetlands and to provide a minimum 100-foot buffer distance to salt marsh harvest mouse habitat. This is expected to necessitate a minor revision to proposed lots in Neighborhood 4, and up to 2,500 square feet of fill to cross a wetland at the site's western edge. To minimize wetland impacts, a boardwalk or similar design shall be incorporated into the final trail design.

**Impact BIO-D5: Impacts could occur from the River Trail A alignment to salt marsh harvest mice present in the South Lowlands at the western edge of the property near the railroad bed. (S)**

Impacts as noted above under Impact BIO-D4 could occur as a result of a trail segment located close to a salt marsh harvest mice habitat.

Mitigation Measures BIO-D5: Mitigation Measures BIO-D4a and BIO-D4c shall be implemented. In addition, signs shall be posted to explain the sensitive nature of wetlands, the nearby presence of salt marsh harvest mice, the importance of the buffer, and the role of buffer plantings. (LTS)

**Impact BIO-D6: Project-related activities may result in impacts to special-status species (nesting short-eared owl, northern harrier, western burrowing owl, and California horned lark) from both the River Trail A and River Trail B alignments. (S)**

Although not currently observed nesting on the Stanly Ranch, these species may colonize the project site prior to grading. If they were to nest on-site during grading for either trail alternative, they would experience impacts.

Mitigation Measure BIO-D6: Pre-construction surveys shall be conducted within 30 days of construction to determine if these species have colonized the site. Surveys for western burrowing owls shall follow CDFG burrowing owl survey protocol. If construction is proposed during the breeding season and these species occupy the site, a buffer 200-feet wide shall be established around nests for northern harrier and short-eared owl. Buffers 100 feet wide are suitable for western burrowing owl and California horned lark. (LTS)

**Impact BIO-D7: For the River Trail A (levee) alignment, removal of eucalyptus trees may result in direct impacts to nesting raptors. (S)**

The Stanly Ranch levee is narrow and lined by eucalyptus throughout much of its length. Loss of trees is anticipated as a result of trail improvements due to poor tree health. If trees are removed during the nesting season, raptors could be killed. This potential impact is most likely during February through July. Raptors are of particular concern because they are at the top of the food chain and are more sensitive to habitat disturbance than are other species of birds. In addition, the tree removal proposed for this project results in a substantial change of wildlife (raptor nesting and perching) habitat.

The removal or pruning of eucalyptus along the levee bank could result in the loss of four red-tailed hawk and red-shouldered hawk nests. Other raptors that could nest in the eucalyptus include Cooper's hawk and long-eared owl.

Mitigation Measure BIO-D7a: From February through July, a pre-construction survey shall be conducted for nesting raptors within 30 days of construction to determine if raptors are nesting in trees slated for removal. Buffers 100 feet wide shall be established around each active nest encountered during the pre-construction survey. These buffers shall be maintained until the young have fledged.

Mitigation Measure BIO-D7b: Tree rows shall be maintained along both sides of Stanly Lane and Old Suscol Road. The loss of trees shall be mitigated in accordance with Mitigation Measures BIO-3a and 3b in Chapter IV. (LTS)

**Impact BIO-D8: For the River Trail A (levee) alignment, impacts to Mason's lilaeopsis could result from repair of the levee along the Napa River or from construction of a trail along the top of the levee. (S)**

Mitigation Measure BIO-D8a: Prior to construction of any trail or repair of any portion of the levee along the Napa River, surveys shall be carried out for Mason's lilaeopsis. Site conditions (area of stand, number of plants, plant cover, associated species, topography, tidal regime, etc.) shall be documented for each of the stands of Mason's lilaeopsis encountered. Construction shall avoid impacts to stands of Mason's lilaeopsis. These stands shall be fenced and the fenced areas noted on project grading plans as areas to be protected. Any stands of Mason's lilaeopsis adversely affected or destroyed by construction shall be replaced. A plan to replace the stand(s) shall be developed in consultation with, and approved by, the State Department of Fish and Game.



Mitigation Measure BIO-D8b: Any soils from project construction shall not be pushed onto stands of Mason's lilaeopsis. Contractors shall be made aware of this condition by way of established construction standards. (LTS)

**Impact BIO-D9: For the River Trail A (levee) alignment, impacts to nesting salt marsh common yellowthroat, a special-status species, could result from repair of the levee along the Napa River or from construction of a trail along the top of the levee. (S)**

At the Stanly Ranch site, nesting habitat for the salt marsh common yellowthroat occurs in the marsh vegetation along the Napa River levee. Any work along the levee for levee repair or establishment of the River Trail or maintenance of the trail could affect nesting habitat of the salt marsh common yellowthroat.

Mitigation Measure BIO-9a: Prior to construction of any trail or repair of any portion of the levee along the Napa River, surveys shall be carried out for nesting salt marsh common yellowthroats. Construction shall avoid impacts to nests of salt marsh common yellowthroats. These nests shall be fenced and a 100-foot buffer established around the nest location. The nest(s) shall be noted on project grading plans.

Mitigation Measure BIO-9b: Any soils from the project construction shall not be pushed into areas supporting nests of salt marsh common yellowthroats. Contractors shall be made aware of this condition by way of established construction standards. (LTS)

**Impact BIO-D10: For the River Trail A (levee) alignment, impacts to listed and special-status fish species (tidewater goby, winter-run chinook salmon, coho salmon, Central California steelhead, delta smelt, longfin smelt, green sturgeon, river lamprey, Pacific lamprey, and Sacramento splittail) could result from repair of the levee along the Napa River or from construction of a trail along the top of the levee. (S)**

Mitigation Measure BIO-D10a: Prior to construction of any trail or repair of any portion of the levee along the Napa River, consultation shall occur with CDFG, National Marine Fisheries Service, USFWS, and the Corps. Fill of wetlands shall be minimized and any fill shall require mitigation at a minimum 1:1 ratio. Measures to limit the generation of silt shall be instituted as described in Mitigation Measures BIO-1, BIO-2, and HYDRO-2. Construction shall occur above the water level and shall be timed to avoid impacts to special-status fish. (LTS)

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**Impact LU-D1: For the River Trail A (levee) alignment, eucalyptus trees along the levee may pose hazards to users of the trail. (S)**

Numerous eucalyptus line the levee bank. A tree survey of other eucalyptus on the property concluded most trees are in poor condition and pose hazardous structural conditions. The narrow trail alignment precludes avoidance of most trees.

Mitigation Measure LU-D1: The health of the eucalyptus shall be surveyed prior to trail construction, and trees which pose hazards to trail users shall be pruned or removed. During pruning or tree removal, all efforts shall be made to minimize siltation of wetlands and the Napa River due to the presence of heavy equipment and disturbance of the soil. (LTS)

**Impact LU-D2: River Trail B (railroad) could result in golf safety hazards unless design changes to the project are incorporated. (S)**

This trail alignment is adjacent to the proposed golf course along much of its length. To minimize risks consistent with golf course industry standards for pedestrian safety, fencing, landscape barriers, distance and/or other design measures would be needed which would likely necessitate design changes to the golf course. In at least one area, hilly topography close to wetlands makes such design changes difficult. The design objectives of the project to provide seamless transition landscaping near the wetland edge uninterrupted by fences or trails would also be compromised.

Mitigation Measure LU-D2: The project applicant shall meet golf course industry standards for pedestrian safety through necessary means, including fencing or other barriers, and/or design changes, should this alternative be selected. To minimize the height of fencing, trails may be designed at a lower elevation than surrounding terrain (i.e., depressed within the terrain) or curved fencing could partially cover the trail alignment. (LTS)

**Impact LU-D3: For both River Trails A and B, limited land use conflicts may occur such as littering, noise, trespass or other nuisances where publicly-accessible trails are adjacent to residential or golf course areas. (LTS)**

River Trail B (railroad) is adjacent to the golf course along much of its length, and both trails would be adjacent to residential back yards along the site's western edge. While such conflicts are not considered significant, design and operation measures should be used to minimize conflicts. Some design measures are counter to the open design proposed by the project.

Condition of Approval LU-D3: The applicant shall work with the City Community Resources Department and Police Department at the final trail design stage to develop trail designs and management regulations for Stanly

Ranch that minimize potential land use conflicts, such as trespass, privacy concerns, motor vehicle use and golf course conflicts. Such measures may include:

- Provision of landscape screening between homes in Neighborhood 4 and proposed trails;
- Provision of barriers to prevent unauthorized motor vehicle use;
- Posting of rules of operation (i.e., time of use, avoidance of trespassing, requests for minimal noise, trail etiquette) at the public access parking area and other appropriate locations; and
- Provision of adequate maintenance and police or private security resources. (LTS)

***Impact LU-D4: Proposed trails could result in limited land use conflicts where they are adjacent to agricultural areas. (LTS)***

Condition of Approval LU-D4: The Specific Plan Zoning shall require attractive fencing and landscaping between either trail alternative and adjacent agricultural lands. (LTS)

***Impact HYDRO-D1: For River Trail A (levee), the existing levees along the Napa River at the project site may fail, and additionally may create a safety hazard to hikers using trails located on the levee. (S)***

The levees at the site are not constructed according to current engineering standards, and therefore cannot be relied upon to offer reliable flood protection for the site Lowlands. It should be noted that possible levee failure would not be a result of the project but could affect the uses of the project site. The current land use of the Lowlands is restricted to livestock grazing. The applicant has “committed to removing grazing from the Lowlands” upon approval of the Stanly Ranch Specific Plan (Kambe, 1997). Except for trails and limited uses such as an Environmental Interpretive Center, no new development that would be affected by the failure of the levees is proposed for the site Lowlands. Existing uses of the levees include access to valve controls for two Pacific Gas and Electric (PG&E) natural gas mains as discussed in Section IV.E located on the South Lowlands levee, and the River Trail A (levee) alternative. The levee is unnecessary for flood control protection. While the applicant proposes to maintain the levee in its current condition through the construction period of the project, once the project is completed, other alternatives may considered.

The proposed hiking trail along the river levee may represent a safety hazard to hikers if not properly designed and maintained. The river side of the levee is undercut in several places, creating near vertical slopes into the river. A trail user



could slip and fall into the river and have difficulty in getting out. To provide a safe trail, reconstruction and short-term and long term maintenance of the levees would be required for public recreational use which otherwise would be unnecessary. The City of Napa has indicated that costs of levee maintenance for trail construction are unpredictable and are a concern (O'Bryon; Stanton, 1998).

Mitigation Measure HYDRO-D1: Unless a public or private agency can demonstrate the desire and financial ability to maintain this 1.3-mile length of the levee, alternative trail locations shall be given priority. (LTS)

## **6. River Trail - Future Options**

a. Off-Site (Cuttings Wharf Extension) Trail Connections through County Lands. Any direct off-site connections to the west of the property from either a Napa River Trail A (levee) or B (railroad) alignment are not planned by the County. Such connections would pass through private lands, require crossing wetlands and a slough near the River Trail A alignment, or wetlands and a creek (River Trail B). However, should the County consider such a future option, a direct connection from the property's southwest levee is not recommended, given the major wetland and slough constraints at this location. For the River Trail B connection, piers should be used across wetlands, or other construction methods should be used to minimize wetland impacts along the historic railroad bed, if such a future connection were considered. Such connections would require further CEQA review.

b. Connector Link Between Project River Trail Segments. The City may, in the future, wish to connect the two project trail loops if the Cuttings Wharf extension noted above is completed. Due to the fact that any future City policy with respect to this extension is not known, the possible Connector Link is beyond the scope of the Stanly Ranch project, and is not proposed to be part of the project. The project applicants, however, do not wish to preempt the ability of the City to provide a connection for the trail loops. The applicants will agree to cooperate with the City in the future. Cooperation would be as follows:

- Granting easements in the Lowlands area for the City to construct the connector trail;
- Providing wetland mitigation sites in unused, non-wetland portions of the Lowlands for use by the City to mitigate trail installation, if necessary; and
- Commitment to this cooperation outlined in the project Development Agreement.

Any such trail connector would require further CEQA review before such a link would be instituted.

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**Appendix E**  
**POLICY ANALYSIS**

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**Table E-1**  
**RELATIONSHIP TO RELEVANT POLICIES OF THE ADOPTED GENERAL PLAN**

Implementing Policy	Project's Relationship to Implementing Policy	Mitigation Measures
<b>RURAL/URBAN LIMIT</b>		
<b>Policy A1. (p. 6-115):</b> <i>The Rural Urban Limit boundary defines the limits of urban development under the General Plan.</i>	<i>Potentially Consistent:</i> Stanly Ranch has been annexed to the City since 1964, and included within the City's Rural Urban Limit line (RUL) since its inception in 1975.	None required.
<b>Policy A1a. (p. 13-6):</b> <i>Urban development shall be concentrated within the RUL so as to preclude expansion of the urban area onto greenbelt lands. Urban development within the RUL line shall be designed and developed to minimize any long-term adverse effects on Napa's agricultural resources, particularly those adjacent to the RUL line.</i>	<i>Potentially Inconsistent:</i> Consistent with City standards, the <i>Draft SRSP</i> has been designed to incorporate agricultural setbacks and residential neighborhood density reductions near the RUL line to minimize impacts on Napa's agricultural resources. However, the land use section of this chapter of the EIR (Section IV.A, Impact LU-1) requires additional measures to adequately reduce potential land use conflicts at the RUL, including incorporation of City agricultural buffer provisions into the proposed SP zoning for residential and resort unit and trail considerations.	Implement mitigation measures which address Impact LU-1.
<b>Policy A1b (p. 6-115) and Policy A5 p.(13-6):</b> <i>City shall continue to encourage the County to maintain a rural greenbelt beyond the RUL and request County to limit uses to primarily agricultural and very low density residential.</i>	<i>Potentially Consistent:</i> The <i>Draft SRSP</i> does not propose any development beyond the RUL, nor does it propose to develop lands within the County's jurisdiction. The majority of unincorporated lands surrounding the <i>Draft SRSP</i> area are designated Agricultural Resource or Agricultural Watershed in the County's General Plan and zoned Agricultural Watershed.	None required.
<b>LAND USE/SITE DEVELOPMENT POLICIES</b>		
<b>Land Use Map, Planning Area 16 (p. 6-112-13):</b> The current Land Use designation for Stanly Ranch is "Study Area".	<i>Potentially Consistent:</i> Lands designated as Study Area in the <i>General Plan</i> are those which require further evaluation prior to a commitment to any specific land use. Any land use change from Study Area requires a general plan amendment and environmental review. The proposed project includes an application for a <i>General Plan</i> amendment.	None required. <i>It is noted a General Plan Amendment is requested.</i>
<b>(a) Residential Development.</b>  <b>Policy B1 (p. 6-115):</b> <i>Project densities shall be set...in accordance with the following standards [defined by policies B1a through B1e].</i>	<i>Potentially Consistent:</i> There is no specific density associated with the Study Area designation because it does not define a specific land use. Any land use change requires a General Plan amendment and environmental review. The proposed project includes an application for a general plan amendment.	None required.

Table E-1 *continued*

Implementing Policy	Project's Relationship to Implementing Policy	Mitigation Measures
<p><b>Policy B1a (p. 6-115): <u>Residential Rezonings</u>.</b> <i>Residential densities generally shall be increased as shown on the General Plan Map to leave adequate urban land within the RUL for growth beyond 75,000 [population] after the year 2000.</i></p>	<p><i>Potentially Consistent:</i> Any residential rezoning for the Stanly Ranch must be consistent with the <i>General Plan</i>. Since there is no specific density associated with the Study Area designation, any land use change and subsequent rezoning requires a General Plan amendment and environmental review. The proposed project includes an application for a General Plan amendment.</p>	<p>None required.</p>
<p><b>Policy B1b (p.6-115): <u>Adequacy of Urban Services</u>.</b> <i>The project density...shall not exceed that which can be served by current or proposed service levels, including circulation, water and sewer service, storm drainage system, schools, police and fire service, transit and other necessary services.</i></p>	<p><i>Potentially Inconsistent:</i> A major issue evaluated in this EIR is the adequacy of urban services to serve the project. The <i>Draft SRSP</i> proposes, or this EIR recommends, construction of circulation improvements both on-site and off-site, as well as payment of traffic mitigation fees for areawide improvements. The project proposes to address transit needs through provision of a project transportation coordinator and an employee transit shuttle. The project proposes, or this EIR recommends, payment of school fees, construction of a new fire station, and generation of revenues for additional police, fire and other city staffing needs attributable to the project. The project proposes to construct an onsite storm drainage system, and water and sewer facilities as follows.</p> <p>The applicant proposes that the project connect to Napa Sanitation District (NSD) facilities for wastewater treatment and reclamation, unless capacity is unavailable. The proposed project would be required to obtain a "will serve" letter from NSD. In the event capacity is not available to serve the project, the <i>Draft SRSP</i> proposes as a backup measure an on-site wastewater treatment/reclamation facility which is addressed in the Alternatives section (Chapter V) of the EIR.</p> <p>Water would be supplied by the City via an existing 36-inch water main which runs through the site. The adequacy of existing and proposed citywide water supplies for this proposal as well as other future City development is analyzed in Section K, Chapter IV of the EIR. Due to City retrofit requirements, voluntary additional retrofits, use of reclaimed water for major landscape areas, and other measures, the project would not increase demand on City water supplies.</p>	<p>The applicant shall undertake implementation of the mitigation measures identified in the Transportation, Public Services and Public Utilities sections of this EIR. In conjunction with B1c, these measures would adequately address potential impacts on service providers and infrastructure.</p>

Table E-1 *continued*

Implementing Policy	Project's Relationship to Implementing Policy	Mitigation Measures
<b>B1c. (p. 6-115):</b> <u>Traffic Constraints and Proposed Improvements</u> . <i>The proposed project shall not result in traffic impacts that exceed adopted service level standards. On-site mitigation measures and fees shall be required to reduce traffic impacts.</i>	<i>Potentially Inconsistent:</i> A Level of Service (LOS) C standard applies to planning the City's future street system and to evaluating projects. As a result, a LOS C standard would be applied to evaluating the project impacts despite the fact that LOS E is currently the countywide standard used by the Congestion Management Agency for SR 29, 12, 121 and 221, and would be the standard used once the <i>Draft General Plan</i> is adopted. Additionally, the <i>Draft General Plan</i> proposes a LOS D standard for signalized City arterials and collectors (except for specified exceptions where LOS E is acceptable), and LOS E for stop-controlled intersections. Should the <i>Draft SRSP</i> be approved prior to adoption of the <i>Draft General Plan</i> , the <i>Draft SRSP</i> General Plan Amendment would need to provide for use of the CMP standard for the affected SR 12/121, SR 29, and SR 29/221 intersections, and <i>Draft General Plan</i> standards for city streets significantly affected by the proposed project. This EIR applies the CMP's LOS E standard in evaluating the impacts of the project on existing CMP network intersections, LOS D for City signalized arterial or collector intersections, and LOS E for City stop-controlled intersections where streets are operating at or above these standards.	Should the <i>Draft SRSP</i> be approved prior to adoption of the <i>Draft General Plan</i> , the <i>Draft SRSP</i> General Plan Amendment shall specify use of the Congestion Management Plan (CMP) standard, and <i>Draft General Plan</i> policy T2.2 for SR 12/121 and 29/12, and <i>Draft General Plan</i> standards, including <i>Draft General Plan</i> Policy T2.2, for City intersections significantly affected by the proposed project. Policy T2.2 ensures that development meet LOS standards unless findings are made that achieving other specific public goals in the <i>General Plan</i> outweigh this requirement.
<b>Policy B1d (p. 6-116):</b> <u>Environmental Constraints</u> . <i>All environmental constraints... shall be identified, analyzed and mitigated consistent with General Plan policies. Mitigation may include reduction in project size and scale (only if there is no other feasible mitigation measure), re-siting and redesign of development, and other appropriate on and off-site measures.</i>	<i>Potentially Consistent:</i> This EIR identifies environmental constraints, analyzes the potential impacts resulting from implementation of the project, and identifies mitigation measures to reduce potential impacts consistent with General Plan policies.	None required.
<b>Policy B1e. (p. 6-116):</b> <u>Neighborhood Character</u> . <i>A residential project shall be compatible with, although not necessarily identical to, the character of the neighborhood in which it is located...</i>	<i>Potentially Consistent:</i> The site is not within any existing neighborhood. The residential portion of the site is proposed to be designed to be compatible with the adjacent on-site resort project.	None required.



Table E-1 *continued*

Implementing Policy	Project's Relationship to Implementing Policy	Mitigation Measures
<p><b>Policy B9 (p. 6-118):</b> <i>Clustering of units and/or reductions in density may be required when developing in the following areas:</i></p> <p>a. <i>On slopes of 15 percent or greater...</i>  b. <i>On lands adjacent to streams and marshes to conserve the stream and marsh habitat and buffer...</i>  c. <i>In other areas where desirable to protect general public scenic areas...wildlife habitats, or to protect against environmental hazards.</i></p>	<p>This policy <i>authorizes</i> the City to require clustering of units or reduced densities, but is not mandatory; thus, a consistency determination is not applicable. However, the <i>Draft SRSP</i> does propose to cluster units to avoid most environmentally sensitive areas or potentially hazardous areas of the site. Residential development proposed by the <i>Draft SRSP</i> is generally located to avoid stream and wetland areas and slopes over 15 percent. Sensitive wildlife habitats are primarily in the Lowlands areas of the site which are proposed to remain open and undeveloped. It is noted that potential impacts to wetlands and wildlife habitat, and appropriate mitigation measures are identified in Section F of this EIR. Additionally, while the policy isn't mandatory, it identifies considerations to be used in evaluating the need for clustering or density reductions. See mitigation measures proposed in Section IV.H, Visual Quality, which recommend additional clustering of residential uses in accordance with this policy.</p>	<p>Not applicable as policy is not mandatory.</p>
<p><b>Policy B10 (p. 6-118):</b> <i>Clustering of units shall be encouraged throughout the City to provide landscaped areas and to reduce grading and construction costs.</i></p>	<p><i>Potentially Consistent:</i> The <i>Draft SRSP</i> proposes clustering of residential units within five neighborhoods around landscaped, golf course fairways. A large portion of the project site would be retained as open space and landscaping.</p>	<p>None required.</p>
<p><b>Policy B11 (p. 6-119):</b> <i>A Draft Specific Plan shall be required for development on large sites where mixed densities and mixed uses are appropriate.</i></p>	<p><i>Potentially Consistent:</i> A <i>Draft Specific Plan</i> has been prepared consistent with this policy and Council direction (1991).</p>	<p>None required.</p>
<p><b>(b) Commercial Development.</b></p> <p><b>Policy C6 (p. 6-119):</b> <i>Attractively designed tourist commercial use shall be encouraged along the river and Highway 29 where services and site conditions can accommodate it, and where access and visibility from thoroughfares is good.</i></p>	<p><i>Potentially Consistent:</i> The Stanly Ranch site is located along Highway 29 and the Napa River. A high quality destination resort and tourist commercial winery and wine center are proposed on the site. The architectural designs of the resort, winery, and wine center are shown in Chapter III of the EIR.</p>	<p>None required.</p>
<p><b>Policy C9 (p. 6-119):</b> <i>Commercial development shall be designed and adverse impacts mitigated to protect the quality of surrounding residential areas...</i></p>	<p><i>Potentially Consistent:</i> The <i>Draft SRSP</i> locates the resort and tourist commercial uses well away from existing and proposed residential neighborhoods and thus has minimal to no impact on these areas. Only the golf clubhouse and some of the parking areas are located near a limited number of proposed homes. The parking areas are proposed to be screened by trees from the closest residential area.</p>	<p>None required.</p>

Table E-1 *continued*

Implementing Policy	Project's Relationship to Implementing Policy	Mitigation Measures
<b>Policy C11 (p. 6-119):</b> <i>Bicycle parking shall be provided in commercial areas. Transit service shall be provided to serve these areas as well.</i>	<i>Potentially Consistent:</i> The <i>Draft SRSP</i> , which contains major new commercial uses, incorporates bicycle parking facilities into major parking lots, such as the employee parking lot and the wine center. Consistent with existing zoning standards, the City would require bicycle parking at all nonresidential lots at a rate of 1 space per 10 vehicle spaces. The project proposes to incorporate a "resort transportation center" for visitors. Shuttle service would be provided to downtown and tourist-related destinations and information on bus, boat and bicycle tour possibilities would be provided. Employee transit shuttles would also be provided. The City would assure, during project approvals/implementation, that these proposed facilities are included in the project.	None required. However, a Condition of Approval would require parking consistent with City Ordinance 17.72.080.
<b>CIRCULATION</b>		
<b>Policy B (p. 7-8):</b> <u>Level of Service (LOS).</u> <i>It is Napa's policy to maintain the LOS as is generally prevalent in Napa today. Thus a mid LOS C is adopted for planning the future street system and for evaluating specific development proposals. Improvement projects defined subsequently in this Circulation Element will be initiated as funding is available before [LOS drops to mid D].</i>	<i>Potentially Inconsistent:</i> See discussion under Land Use Policy B1c.	See mitigation measures under Land Use Policy B1c.
<b>Policy I (p. 7-22):</b> <u>Street Standards.</u> <i>Current City Street Standards for collectors are 40-foot + 10-foot (bike lanes) curb to curb width for moderate volume collectors, with curb, gutter and sidewalk. At the discretion of the City, the bicycle lanes may be eliminated (where off street bike lanes are proposed, for example.)</i>	<i>Potentially Inconsistent:</i> As in the <i>Big Ranch Specific Plan</i> , the <i>Stanly Ranch Specific Plan</i> may propose alternate street standards for the area. The <i>Draft SRSP</i> proposes the Stanly Lane entry street with a separated bicycle/pedestrian path alongside it, but with no concrete sidewalk. With a General Plan amendment containing a different standard for Stanly Lane, the proposed <i>Draft SRSP</i> street design for Stanly Lane would be acceptable.	The <i>Stanly Ranch</i> General Plan Amendment shall include street standards for the Stanly Ranch.

Table E-1 *continued*

Implementing Policy	Project's Relationship to Implementing Policy	Mitigation Measures
<b>SEISMIC SAFETY/SAFETY/NOISE</b>		
<b>Policy 12 (p. 9-25):</b> <i>Adequate water supply shall be maintained to cover the needs of the community with particular emphasis on fire protection.</i>	<i>Potentially Inconsistent:</i> Water would be supplied by the City of Napa via an existing 36-inch water main which runs through the site. Adequacy of existing and proposed citywide water supplies for this project as well as other future City development is analyzed in Section K of Chapter IV of the EIR. As discussed, the project does not increase demand on City water supplies due to mitigation measures proposed by the applicant and/or this EIR. Onsite facilities would be required to satisfy all fire protection standards..	Water supply mitigation measures identified in Section IV.K, Public Utilities (UTIL-1) of this EIR shall be implemented.
<b>Policy B7b. (p. 12-25):</b> <i>Reduce air pollutants generated by automobile traffic by...locating new residential development ...near urban services and public transit, and improving traffic circulation. Provide land for convenience or neighborhood shopping centers throughout the city...</i>	<i>Potentially Inconsistent:</i> Urban services would need to be extended to serve the proposed project. However, the project proposes (or is required by this EIR) to mitigate adverse traffic and circulation impacts, provide transit-related services, and provide a convenience store in the wine center. The project's inconsistency with this policy would be partially mitigated by transit-related measures proposed in the <i>Draft SRSP</i> congestion management policies 4.1 through 4.6 and the project's most recently proposed Transportation Demand Management Program, April 17, 1998. While an on-site neighborhood shopping center is not required by city policy, the nearest shopping area for project residents' day-to-day needs would be located about 2.5 to 3 miles from the project site. The distance to urban services and transit leads to the recommended mitigation measure and General Plan amendment.	Through the Development Agreement, the applicant and City shall investigate means of providing more on-site commercial uses within the proposed wine center to meet everyday needs such as dry cleaning, banking, and grocery facilities for residents and employees.  Should the <i>Draft SRSP</i> be adopted prior to adoption of the <i>Draft General Plan</i> , the <i>Draft SRSP</i> General Plan Amendment shall include an exception to Policy B7b for mixed use projects where substantial traffic reduction programs, and urban services are provided on-site.



Table E-1 *continued*

Implementing Policy	Project's Relationship to Implementing Policy	Mitigation Measures
<b>OPEN SPACE</b>		
<p><b>Policy C2a. (P. 13-7):</b> <i>Scenic resources, such as prominent ridgelines and hillsides, waterways and other natural resource areas shall be protected as open space wherever possible by siting structures to minimize land alteration and vegetation removal.</i></p>	<p><i>Potentially Inconsistent:</i> The location of Stanly Ranch, at the junction of SR 12/121 and 29/12, is an important gateway to the City and Napa Valley. Protecting site scenic resources as open space, particularly the highly visible North Lowlands to the east of SR 29/12 and the south Lowlands along the Napa River was an important consideration in developing the <i>Draft SRSP</i>. Development areas in large part have been sited to minimize land alteration. Additionally, minimizing loss of the eucalyptus windrows was initially a primary objective of the <i>Draft SRSP</i> in the design of Stanly Lane and the project. However, arborist review by both the applicant and the City concluded these eucalyptus windrows are in rapidly declining health. The City's consultant states these windrows will be decimated in 5-10 years regardless of what happens on the site, and are very hazardous, making them unsuitable for any land use where there is regular use of Stanly Lane. While it is therefore not possible to minimize vegetation removal in this case, the applicant has still chosen to retain limited numbers of eucalyptus to maintain a short term windrow effect and provide short term partial screening of the site and plant new trees to provide new screening.</p> <p>With loss of the trees, Home Hill becomes a more prominent ridgeline/hillside about almost a half-mile west of and visible from Highway 29. Removal of the proposed easternmost 5-6 townhomes and row of homes to the second cul de sac, and replanting this area with a new grove of trees, would significantly reduce this impact. It would also further reduce land alteration by avoiding small areas of steeper slopes.</p>	<p>On Home Hill (Neighborhood 2), the applicant shall eliminate the easternmost six townhomes and the proposed easternmost row of homes (about 36 lots) to the second cul-de-sac/circle-with park. At the earliest possible time as part of Phase 1, the applicant shall replant this area with a new tree grove comprised of native and ornamental species of sufficient height to screen two-story homes within five years of planting.</p>
<b>PARKS AND RECREATION</b>		
<p><b>1.12 (p.15-42):</b> <i>Identify and utilize equitable and realistic methods of financing and/or implementing acquisition, improvement, operation and maintenance of public parks and recreation facilities and related open spaces. No credit towards public dedication or impact fee requirements shall be given for the provision of private recreational facilities.</i></p>	<p><i>Potentially Inconsistent:</i> Financing and maintenance mechanisms would be worked out during or as conditions of the permit review process. However, as the <i>Draft SRSP</i> is a planned development and proposes private recreational parks which may be eligible for credit against fees, and State law states such developments shall be eligible to receive such credit (Gov. Code 66477), a General Plan amendment consistent with the <i>Draft General Plan</i> wording is part of the project.</p>	<p>Should the <i>Draft SRSP</i> be approved prior to the <i>Draft General Plan</i>, the <i>Draft SRSP General Plan</i> amendment shall modify PR1.12 to permit credits to be given for the provision of private recreational facilities.</p>

**Table E-2**  
**RELATIONSHIP TO RELEVANT POLICIES OF THE DRAFT GENERAL PLAN**

Implementing Policy	Project's Relationship to Implementing Policy	Mitigation Measures
<p><b>Study Area Land Use Designation:</b> <i>In June, 1998, the Planning Commission recommended that the "Study Area" designation be retained in the Draft General Plan until the Draft SRSP provides sufficient information to determine the appropriate land use for the Stanly Ranch property.</i></p>	<p><i>Potentially Consistent:</i> Lands designated as Study Area in the <i>Draft General Plan</i> are those which require further evaluation prior to a commitment to any specific land use. Any land use change from Study Area requires a General Plan amendment and environmental review. The proposed project includes an application for a General Plan amendment.</p>	<p>None required. <i>It is noted a General Plan Amendment is requested.</i></p>
<p><b>Draft General Plan Policy Document <u>Land Use Map</u> for Stanly Ranch Planning Area #12</b></p> <p><b>Reader Note:</b> The Planning Commission has recommended that all Stanly Ranch <u>Land Use Map</u> information described herein be deleted from the <i>Draft General Plan</i> in order for the <i>Draft SRSP</i> to provide sufficient information to determine the appropriate land use for the Stanly Ranch property. Thus, this information is included only for reference and in the event that the Council reinstates the land use designation.</p>	<p><i>Potentially Partially Consistent:</i> The <i>Draft General Plan Policy Document</i> Land Use Map proposed tourist commercial, residential, and "public serving" land uses for the Stanly Ranch site (Figure IV.B-2). The <i>Draft SRSP</i> proposes the following two changes to this map: 1) A Multi-Family Residential designation is proposed for the employee housing site rather than Single-Family Infill (SFI); and 2) the <i>Draft Policy Document's</i> Single Family Residential pod 210 is proposed to be designated Tourist Commercial to reflect the resort uses proposed in this area. As the <i>Draft SRSP</i> is a General Plan amendment, if the <i>Draft SRSP</i> is adopted, the <i>SRSP</i> map would update and replace the <i>Draft General Plan</i> map, making them consistent. In most other respects, the <i>Draft General Plan Policy Document</i> Land Use Map and land use designations are consistent with the <i>Draft SRSP</i>.</p> <p>The <i>Draft Policy Document</i> provided for a maximum FAR of 0.5 for pods TC-551 and TC-552. Proposed resort, wine center and winery development in these areas includes a total of about 543,000 square feet. This amount of development would not exceed an FAR of 0.5 even if the land area within these pods that is proposed for golf course and other open space areas is not included in the total land area used to calculate FAR. These development areas could be subdivided such that at the project level each project would meet the 0.5 FAR for its site.</p> <p>The SFI "Single Family Infill" designation provided for residential densities at 3-8 units per net acre and permits higher densities in limited instances; the <i>Draft SRSP</i> proposes five residential neighborhoods at densities of 3 to 8 units per gross acre. Some parts of these neighborhoods, notably the townhome areas, would have higher net densities, but the majority would not.</p>	<p>The following measures would make the <i>Draft SRSP</i> consistent with the <i>Draft Policy Document</i> Land Use Map for Planning Area #12:</p> <ul style="list-style-type: none"> <li>• The <i>Draft SRSP</i> (p. 13) shall be corrected to refer to Figure 5 as the <i>Draft SRSP</i> Land Use Plan, not the land use designations identified by the <i>Draft General Plan</i> for the project site. (If the <i>Draft SRSP</i> is adopted, this map would update and replace the <i>Draft General Plan</i> map as the General Plan land use map for the Stanly Ranch property).</li> </ul> <p>Reader Note: The correction also needs to occur with the "Study Area" designation.</p> <p>See discussion and Mitigation Measure under LU4.1</p>

Table E-2 *continued*

Implementing Policy	Project's Relationship to Implementing Policy	Mitigation Measures
	<p>The <i>Draft General Plan Policy Document</i> also identified a maximum of 600 residential units for the project site. The <i>Draft SRSP</i> proposes 594 residential units comprised of 54 employee housing units and 540 residential units distributed between five neighborhoods. The <i>Draft SRSP</i> also proposes 300 resort units. As stated in the discussion under Policy LU4.1, if the resort units are considered resort/commercial uses, the project would be consistent with the site's <i>Draft General Plan</i> maximum of 600 residential units.</p> <p>Two hundred of the units would be rental cottages owned and operated by Carefree. Another 25 units would be operated by Carefree as Carefree Club timeshare units. However, 75 of the proposed resort units could be purchased privately by investors and could be occupied full-time. If this happened, the 600-unit limit could be exceeded.</p> <p>See expanded discussion and mitigation under LU4.1</p> <p>The <i>Draft SRSP</i> also proposed a Multi-Family Residential (MFR) designation for areas proposed for employee housing at a density of 18 units per gross acre. The <i>Draft Policy Document</i> defines residential densities for this designation as between 10 to 40 units per net acre.</p> <p>While the proposed MFR designation would include development within this range, the <i>Draft General Plan Policy Document</i> states that uses in this designation at densities greater than "15 units/acre shall generally be located nearest to thoroughfares, transit corridors and community serving commercial and public/quasi public uses, and encouraged adjacent to employment and neighborhood-serving commercial uses." The <i>Draft SRSP</i> may be only partially consistent with this directive. The proposed MFR designation would be near employment but not "nearest" to thoroughfares, transit corridors or community or many neighborhood serving commercial uses. As the low income employee housing is a desired project component for other reasons, a General Plan amendment is recommended to assuredly permit such housing in its proposed location.</p>	<ul style="list-style-type: none"> <li>The <i>Draft SRSP</i> General Plan amendment shall include an exception to <i>Draft General Plan</i> "MFR" language to permit densities greater than 15 units/acre at the Stanly Ranch for low-income employee housing.</li> </ul> <p>Reader Note: As the Stanly Ranch would utilize a citywide "Multi-Family Residential" land use designation, this language would need to be part of the Stanly Ranch General Plan amendment.</p>



Table E-2 *continued*

Implementing Policy	Project's Relationship to Implementing Policy	Mitigation Measures
	Recreational uses may be permitted in SFI areas; a golf course is proposed in parts of this area. The Public Serving designation allows large open space areas and public/quasi public uses, which is consistent with the uses proposed in the <i>Draft SRSP</i> . Tourist Commercial designations permit resorts and other retail commercial complexes such as the wine center/winery.	
<b>RURAL URBAN LIMIT/AGRICULTURAL PROTECTION</b>		
<b>Policy LU1.1:</b> <i>City shall maintain the RUL to define the extent of urban development through the year 2020 and to provide for the maintenance of the City's surrounding open space/agriculture to separate Napa from other communities.</i>	<i>Potentially Consistent:</i> Since its adoption in 1975, the City's RUL has included the Stanly Ranch site; this boundary is not proposed to be expanded.	None required.
<b>Policy LU2.1:</b> <i>The Rural Urban Limit (RUL) shall define the extent of urban development through the year 2020.</i>	<i>Potentially Consistent:</i> The <i>Draft SRSP</i> is consistent with this policy; Stanly Ranch is within the City's RUL.	None required.
<b>Policy LU3.2:</b> <i>To minimize urban/rural conflicts (e.g., pesticides, odors, noise, vandalism, feral pets), the City shall ensure a buffer is provided (agricultural setback) between residential uses on the periphery of the RUL and productive agricultural land outside the RUL.</i>	<i>Potentially Inconsistent:</i> The <i>Draft SRSP</i> respects the vineyards located along its western boundary by including land use policy 1.5: "Provide for an 80-foot agricultural setback along the west side of the ranch" ( <i>Draft SRSP</i> , Objective 1, Policy 1.5). Proposed zoning should directly implement this policy directive by including the agricultural setback and related noise and "right to farm" notice provisions for the residential neighborhoods. As resort units would be occupied by resort guests and could be occupied on a longer term basis, it would be wise to apply such restrictions to the resort units as well. Appendix B does not currently include such provisions for the resort area.	The <i>Draft SRSP</i> Appendix B (Land Use and Development Standards and SP Zoning) shall be amended to incorporate and apply the provisions of Section 17.60.090 of the Zoning Ordinance regarding agricultural buffers for all homes and resort units in Proposed SP Zone Districts 1 and 2 within 300 feet of the RUL.
<b>Policy LU3.3:</b> <i>To minimize urban/rural conflicts and create an appropriate transition between higher density urban uses and very low intensity agricultural/rural/resource uses, the City shall "feather" new residential development near to the RUL, especially toward land outside the RUL which is in active agricultural production. "Feathering" is defined as allowing progressively lower density residential development close (within 1/4 mile) to the RUL.</i>	<i>Potentially Consistent:</i> <i>Draft SRSP</i> materials supplied by the applicant after May, 1997, propose to reduce residential densities in Neighborhoods 4 and 5, closest to the agricultural areas. Land use policy 1.4 of the <i>Draft SRSP</i> proposes to "encourage open spaces along the RUL line and lowland edges to provide a transition between the residential and resort activities and agricultural and open space uses". The resort commercial area has also complied with this feathering policy by clustering smaller resort cottages at the center of the resort area, and placing larger units at lesser intensity along the RUL.	None required.

Table E-2 *continued*

Implementing Policy	Project's Relationship to Implementing Policy	Mitigation Measures
<b>LAND USE RELATED SITE DEVELOPMENT POLICIES</b>		
<b>Policy LU1.2:</b> <i>City shall strive to...develop new neighborhoods with the same qualities as the existing neighborhoods.</i>	<i>Potentially Consistent.</i> In height, density and physical appearance, the units would be compatible with homes found in other city neighborhoods. Quality of the proposed golf-oriented neighborhoods is expected to be high. The <i>Draft SRSP</i> provides for a total of up to 540 for-sale homes in five separate new neighborhoods, and up to 54 employee housing units. Housing types include single-family, detached homes ranging in size from 1,900 to 3,800 square feet and duplexes and townhomes or similar housing types of 1,500 to 2,300 square feet. Employee housing apartments would be developed at a density up to 18 units per acre.	None required.
<b>Policy LU1.4:</b> <i>City shall recognize the importance of historic properties, districts and aesthetic resources as contributors to the City's identity.</i>	<i>Potentially Consistent:</i> How historic resources are "recognized" is a subjective determination by the City. Aesthetic and historic resources on the site which have been identified as part of the environmental review include the existing eucalyptus windrows, and several buildings and structures, some of which are proposed to be integrated into the project design. Limited parts of the eucalyptus windrows are proposed to be preserved, based on arborist recommendations that the health of the trees is rapidly declining.	None Required.
<b>Policy LU1.5:</b> <i>City shall refine the locations and concept of the key gateways to the City. . . and shall establish gateway and scenic corridor design guidelines . . . to assure attractive entrances to the City. Greenways, open space, riparian corridors and wetland areas shall be considered as important components when they exist in gateway locations.</i>	<i>Potentially Consistent.</i> SR 12 and 29 are designated scenic corridors, and the site may be considered a gateway location. City gateway and scenic corridor guidelines have not yet been developed. However, maintaining an attractive entrance has been a consideration in developing the <i>Draft SRSP</i> . The highly visible North Lowlands to the east of SR 29/12 and the South Lowlands along the Napa River, which are primarily wetlands, are to remain open. Several creeks/drainageways along SR 29/12 are proposed to be retained and enhanced. A major objective of the May, 1997, Draft SRSP was to preserve the eucalyptus windrows along SR 29/12 to the greatest extent possible. However, a tree survey conducted to provide input to the EIR found that most areas of the windrows are diseased and/or in poor condition. (This conclusion was confirmed by a City arborist evaluation.) The applicant proposes to remove most of the trees but to retain a windrow effect along Stanly Lane. In addition, the applicant proposes to add extensive new tree plantings to recreate a "greenway along SR 29/12.	None required.

Table E-2 *continued*

Implementing Policy	Project's Relationship to Implementing Policy	Mitigation Measures
<b>Policy LU1.6:</b> <i>City shall designate SR 29, SR 121, and SR 221 as scenic corridors. The City shall endeavor to improve the scenic character of these roads through undergrounding of utilities, increased landscaping, street tree planting, and other improvements.</i>	<i>Potentially Consistent:</i> The Stanly Ranch is located at the junction of SR 12/121 and 29/12 and is a major gateway to the City of Napa and Napa Valley. New utilities required to serve the project would be required to be undergrounded. The <i>Draft SRSP</i> includes street tree planting recommendations and extensive tree replanting. Added landscaping would also be required as part of all subsequent architectural approvals.	None required.
<b>Policy LU1.7:</b> <i>City shall enhance the Napa River as a natural corridor and recreational spine connecting neighborhoods, employment areas, and other destinations.</i>	<i>Potentially Consistent:</i> The Napa River forms the eastern and southern boundary of the project site. The <i>Draft SRSP</i> proposes to retain the Lowlands areas adjacent to the river as primarily an open, undeveloped corridor. The <i>Draft SRSP</i> also proposes to provide public access to and passive recreational use of these areas in the form of a private Environmental Interpretive Center accessible from Stanly Lane and a public River Trail.	None required.
<b>Policy LU3.4:</b> <i>City shall endeavor to maintain an even rate of development within the RUL over the plan period.</i>	<i>Potentially Consistent:</i> Stanly Ranch is within the RUL and is proposed to be phased over a period of ten years which will help maintain an even rate of development.	None required.
<b>Policy LU3.5:</b> <i>City shall provide for the efficient development...of lands within the RUL in order to allow job and housing growth through the end of the planning period.</i>	<i>Potentially Consistent:</i> Development proposed by the <i>Draft SRSP</i> anticipates approximately 500 jobs in the golf course resort, winery and wine center, and up to 540 homes and up to 54 employee housing units over a 10 year period.	None required.
<b>Policy LU3.6:</b> <i>City shall program land uses so as to maximize the use of available public facilities and minimize the need for new facilities.</i>	<i>Potentially Consistent:</i> To minimize the need for new public facilities and their maintenance, many Stanly Ranch facilities, such as residential streets and storm drainage are proposed to be private. The project would also minimize added water and wastewater demand through a variety of mitigation measures. The project would include construction of a new fire station needed to serve the site and provide sufficient fiscal revenues to fund its ongoing maintenance and staffing.	None Required. However, refer to Sections IV.C, Transportation, IV. J, Public Services, and IV.K, Public Utilities for mitigation measures related to service impacts.
<b>Policy LU3.7:</b> <i>City shall maintain adequate supply of land designated for residential uses to accommodate the plan's projected population growth. To this end, the City shall monitor the ability of the plan to achieve this growth through such means as monitoring of plan changes from residential to nonresidential...</i>	<i>Potentially Consistent:</i> The <i>Draft General Plan Policy Document</i> recognized the potential of this major property to provide opportunities for residential use by identifying the site as a location for up to 600 new homes. <sup>a</sup> The <i>Draft SRSP</i> proposes up to 540 for-sale homes and 54 employee rental units.	None required.

<sup>a</sup> Refer to footnote "d" under Table IV.B-1 on page IV.B-20 regarding the latest recommendation for the project site.



Table E-2 *continued*

Implementing Policy	Project's Relationship to Implementing Policy	Mitigation Measures
<p><b>LU4.1:</b> <i>The City shall require new residential development to conform to the density range shown in Table 1-4.</i></p> <p><b>Reader Note:</b> The Planning Commission has recommended that the Table 1-4 information relating to Stanly Ranch be deleted from the <i>Draft General Plan</i> in order for the <i>Draft SRSP</i> to provide sufficient information to determine the appropriate land use for the Stanly Ranch property. Thus, this information is included only for reference and in the event the Council were to reinstate the land use designation.</p>	<p><i>Potentially Consistent:</i> No specific densities for Stanly Ranch were shown in Table 1-4. Instead, Table 1-4 of the <i>Draft General Plan</i> identified up to 600 residential units for the Stanly Ranch area.<sup>b</sup> The <i>Draft SRSP</i> proposes up to 540 for-sale homes, 54 employee rental units. It additionally proposes 200 rental resort cottages and 100 resort homes, of which 25 would be timeshare units operated by Carefree. If the resort homes/cottages are considered commercial resort uses, the project would be consistent with this policy of the <i>Draft General Plan</i>.</p> <p>Seventy-five of the proposed resort units would be "resort homes". These units could be occupied full-time. However, these investor units are considerably more costly than similar units in nearby neighborhoods as they have the benefit of being able to be placed in a rental pool and have maid service, etc. They would also have a transient resort, rather than a residential, location. At Silverado Resort, less than 2 percent of the resort units have full-time occupants, although about a fourth are occupied part time as second homes and are not in the rental pool. At The Boulders Carefree Resort in Arizona, up to 25 percent of the resort units have permanent occupants. To assure that these 75 units are not permanently occupied homes, the applicant has agreed they could be required to place all units in the rental pool for a specified period of time each year.</p>	<p>To comply with the <i>Draft General Plan</i> recommendation for 600 total units on the project site, the 75 resort homes shall be required to be placed in the rental pool for a specified period of time each year. Alternatively, the <i>Draft SRSP</i> could be amended to reduce the total number of units within the proposed project (If it is assumed that 2 to 25 percent, or 2-19 of the 75 resort units could potentially be permanently occupied, the total number of proposed units would need to be reduced by 13.)</p> <p>Reader Note: As the Planning Commission has recommended retention of the "Study Area" designation for Stanly Ranch and deletion of Stanly Ranch Table 1-4 land use information from the <i>Draft General Plan</i>, this mitigation measure would not be necessary if the council adopts the commission's recommendations. The <i>Draft SRSP</i> General Plan amendment would provide information to establish appropriate land uses for the site.</p>
<p><b>Policy LU4.2:</b> <i>The City shall allow for...supporting services and alternative residential types...by permitting recreational uses, public and quasi-public uses, churches, day care and congregate care living facilities...when they meet the standards for development that protect neighborhood character.</i></p>	<p><i>Potentially Consistent:</i> Recreational and public-serving uses are proposed as part of this mixed-use project. Uses such as small day care facilities are permitted in residential homes by state law.</p>	<p>None required.</p>
<p><b>Policy LU4.5:</b> <i>City shall allow development of attached units in the Single-Family Infill (SFI)...land use designations when such units are compatible with the design characteristics of surrounding residential uses.</i></p>	<p><i>Potentially Consistent:</i> The <i>Draft SRSP</i> proposes a Single Family Infill land use designation; these areas are consistent with this policy in that a mix of housing types are proposed at the planning stage so that attached units can be designed to be compatible.</p>	<p>None required.</p>

<sup>b</sup> Refer to footnote "d" under Table IV.B-1 on page IV.B-20 regarding the latest recommendation for the project site.

Table E-2 *continued*

Implementing Policy	Project's Relationship to Implementing Policy	Mitigation Measures
<b>Policy LU4.10:</b> <i>City shall require the preparation and adoption of specific plans for large areas of undeveloped land or areas with special infrastructure or financing considerations.</i>	<i>Potentially Consistent:</i> The Draft SRSP is consistent with this requirement.	None required.
<b>Policy LU5.3</b> <i>City shall require major new commercial projects to be designed to support mass transit and alternative modes of transportation.</i>	<i>Potentially Consistent:</i> The Draft SRSP, which contains major new commercial uses, proposes new public and private pedestrian and bicycle trails and bicycle parking facilities, and incorporates several strategies from the 1995 Congestion Management Program to help support transit use, carpooling and alternatives to vehicles including, but not limited to: hiring an Employee Transportation Coordinator and installing a "car pool hot line" to encourage carpooling and transit use; providing a resort transportation center for visitors to provide shuttle service to downtown and provide information on bus, boat and bicycle tour possibilities. The City would assure, during project approvals, that these proposed facilities are included in the project. While bicycle parking at the hotel and golf clubhouse is not currently addressed, these facilities are required to be provided by city ordinance and would be a condition of approval.	None required; however, a condition of approval would require compliance with city ordinance 17.72.080.
<b>Policy LU5.6:</b> <i>...tourist commercial uses...shall be located in areas where traffic patterns are oriented to major arterial streets and highways and/or where ...development will not affect...existing developments.</i>	<i>Potentially Consistent:</i> The Draft Specific Plan locates tourist commercial uses where they would not affect existing residential neighborhoods. The retail wine center would be located on the site's main entry street near its intersection with SR 12/121; the resort access is the same intersection.	None required.
<b>Policy LU5.7:</b> <i>City shall encourage developers of larger commercial projects to provide for on-site mixed uses that would allow employees to make non-work-related trips (e.g., banking, lunch, dry cleaning, recreation, child care) without having to use their automobiles.</i>	<i>Potentially Partially Inconsistent:</i> The Draft SRSP includes on-site public recreational trails and encourages development of a neighborhood convenience store in the wine center consistent with this policy. However, commercial services such as banking, lunch or dry cleaning may not be available on the site, and the City is to encourage such uses.	Through the Development Agreement, the applicant and City shall investigate means of providing more on-site commercial uses within the proposed wine center to meet everyday needs such as dry cleaning, banking, and grocery facilities for on-site residents and employees.
<b>Policy LU5.8:</b> <i>City shall encourage automobile oriented uses to locate parking in areas less visible from the street (...e.g., reverse frontage commercial centers).</i>	<i>Potentially Consistent:</i> Proposed parking lots would be screened from site streets by existing or proposed windrows, landscaping and/or berming. Section IV.H of Chapter IV identifies potential visual impacts.	None required. Refer to Section IV.H of Chapter IV of the EIR.
<b>Policy LU8.1:</b> <i>City shall promote efficient use of larger vacant parcels...by encouraging mixed use development.</i>	<i>Potentially Consistent:</i> The Draft SRSP proposes a mixed use project consistent with City policy to encourage mixed use development.	None required.

Table E-2 *continued*

Implementing Policy	Project's Relationship to Implementing Policy	Mitigation Measures
<b>Policy LU9.1:</b> <i>City shall promote an urban form that integrates the urban environment with the City's natural features.</i>	<i>Potentially Consistent:</i> A strength of the <i>Draft SRSP's</i> design approach is that it respects natural features of the site. The Napa River and its Lowland flood plain and wetland areas are generally left open and undeveloped; transition zone landscaping is proposed between Lowlands areas and site development. Drainageways are also left open and are proposed for enhancement. There are only a few acres of steep hillsides on the entire property, and development is clustered to avoid much of this area. The eucalyptus windrows are an important existing site feature. A major objective of the May, 1997, <i>Draft SRSP</i> was to retain these windrows to the greatest extent possible. However, arborist evaluations by both the applicant and later by the City concluded in 1997 and 1998 that these trees are rapidly declining. The City's arborist consultant predicted the trees will be decimated within 5-10 years, regardless of future land use. Tree loss is therefore not considered to be "caused" by the project. However, the applicant proposes to retain a semblance of the existing windrows until new tree replanting is established.	None Required.
<b>Policy LU9.2</b> <i>City shall continue to apply special development standards to proposed development within or adjacent to...</i>  a. <i>Riparian corridors and wetlands (including the Napa River)</i> b. <i>Hillsides;</i> c. <i>Critical wildlife habitat; and</i> d. <i>Agricultural land outside the RUL.</i>	<i>Potentially Inconsistent:</i> Special design standards including, but not limited to, the following have been included in the <i>Draft SRSP</i> : buffer areas near wetlands; riparian corridors and agricultural lands outside the RUL; and, avoidance of wetlands and riparian corridors which are typically the more critical wildlife habitat areas. The <i>Draft SRSP</i> policies and proposed land use map incorporate many of these standards. This EIR includes additional mitigation measures to better address potential agricultural/urban conflicts, and hillside development.	Implement Mitigation Measures POL-2c and 2d, which address agricultural buffers and hillside development.
<b>Policy LU9.4:</b> <i>City may require planned unit and cluster forms of developments in environmentally sensitive areas...</i>	<i>Potentially Consistent:</i> The <i>Draft SRSP</i> proposes to cluster development to avoid wetlands, riparian corridors, and flood plains.	None required.
<b>Policy LU10.9:</b> <i>City shall continue to promote the City of Napa as a tourist destination.</i>	<i>Potentially Consistent:</i> The <i>Draft SRSP</i> is consistent with policies to promote Napa as a tourist destination because it proposes that the site serve as a destination resort, commercial wine center and winery.	None required.
<b>Policy LU10.12:</b> <i>City shall improve visual, transit and pedestrian linkages between downtown and...other future visitor-oriented development.</i>	<i>Potentially Consistent:</i> The resort at Stanly Ranch would be linked to Napa's downtown by a new Bay Trail connection and through development of an on-site transportation center proposed as part of the resort (Circulation Policy 4.4). The transportation center would provide transit and tour information and operate a shuttle service that would connect the Stanly Ranch with the downtown and other tourist destinations in the Napa Valley, directly or indirectly.	None required.



Table E-2 *continued*

Implementing Policy	Project's Relationship to Implementing Policy	Mitigation Measures
<b>Policy LU10.13:</b> <i>City shall designate appropriate sites within the RUL to encourage hotel and tourist/conference facility development.</i>	<i>Potentially Consistent:</i> The <i>Draft Policy Document</i> proposes Stanly Ranch as an appropriate site for tourist commercial uses. The <i>Draft SRSP</i> proposes a resort facility with guest cottages, rental homes and conference facilities.	None required.
<b>TRANSPORTATION</b>		
<b>Policy T7.1:</b> <i>City shall continue to require that commercial and industrial projects requiring more than 10 parking spaces provide bicycle parking at the rate of 1 space per 10 parking spaces.</i>	<i>Potentially Consistent:</i> While inadequate information is available to assess the rate of bicycle parking to be provided by the project, existing city ordinances would require bicycle parking at the amount proposed in the <i>Draft General Plan</i> .	None required. However, a condition of approval would require bicycle parking consistent with city ordinance 17.72.080.
<b>Policy T9.1</b> <i>City shall require sidewalks along at least one side of all new local streets and both sides of new arterials and collectors.</i>	<i>Potentially Inconsistent:</i> The <i>Draft SRSP</i> proposes some new local streets and collectors with separated multi-use trails in lieu of sidewalks and private streets without sidewalks. As in the <i>Big Ranch Specific Plan</i> , the <i>Draft SRSP</i> may propose alternate street standards for the area. With a General Plan amendment containing the different standard, the proposed <i>Draft SRSP</i> street design would be acceptable.	The project (General Plan Amendment) shall include street standards for the Stanly Ranch.

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**Appendix F**  
**HYDROLOGICAL DATA AND PLANS**

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**Appendix F (1)**  
**Water Quality Data Collected from the**  
**Napa River by the Napa Sanitation District**

# NAPA SANITATION DISTRICT

October 1996

Napa River Data/Observation Report						CC-3		
Parameter	CC-1	CC-2	CC-3	CC-4	CC-5	DAY	FLOW CFS	DILUTION
Total Coliform (MPN)			35000			10/01	<3	0
Ammonia Nitrogen (mg/L)			0.7			10/02	<3	0
Un-ionized Ammonia as N (mg/L)			0.002			10/03	<3	0
Turbidity (NTU)	7.6	7.9	8.6	7.7	9.3	10/04	<3	0
pH	7.1	7.4	7.5	7.6	7.6	10/05	<3	0
D.O. mg/L	8.3	8.2	8.4	8.6	8.4	10/06	<3	0
% Saturation	81	80	82	83	82	10/07	<3	0
Temp (C)	14	14	14	14	14	10/08	<3	0
Color(Apparent)	CLEAR	CLEAR	CLEAR	CLEAR	CLEAR	10/09	<3	0
Sulfides (Total)						10/10	<3	0
Sulfides(Dissolved)						10/11	<3	0
Chlorophyll "A"		<	5			10/12	<3	0
Chlorides (mg/L)	7900	8100	6300	7800	8600	10/13	<3	0
						10/14	<3	0
Floating/Susp.(P/A)	A	A	A	A	A	10/15	<3	0
Oil/Grease						10/16	<3	0
Algae						10/17	<3	0
Other Type						10/18	<3	0
Affected Area						10/19	<3	0
Water Depth(ft)	19	16	12	23	18	10/20	<3	0
Sample Depth(ft)	1	1	1	1	1	10/21	<3	0
Odor: (P/A)	A	A	A	A	A	10/22	<3	0
Type						10/23	<3	0
Source						10/24	<3	0
Wildlife	A	A	A	A	A	10/25	<3	0
Fishermen	A	A	A	A	A	10/26	<3	0
Other Rec. Activ.						10/27	<3	0
Date	10/30/96	10/30/96	10/30/96	10/30/96	10/30/96	10/28	36	2.38
Time	0945	0940	0935	0930	0925	10/29	52	3.58
Analyst	TT	TT	TT	TT	TT	10/30	51	2.95
Wind Direction	040	040	040	040	040	10/31	45	2.44
Wind Speed(Knots)	4	4	4	4	4			
Air Temp (C)	13	13	13	13	13			
High Tide Time	0450	0450	0450	0450	0450			
High Tide Height	6.3	6.3	6.3	6.3	6.3			
Low Tide Time	1004	1004	1004	1004	1004			
Low Tide Height	2.9	2.9	2.9	2.9	2.9			

# NAPA SANITATION DISTRICT

November 1996

## Napa River Data/Observation Report

Parameter	CC-1	CC-2	CC-3	CC-4	CC-5	DAY	CC-3 FLOW CFS
Total Coliform (MPN)			1600			11/01	33
Ammonia Nitrogen (mg/L)			0.6			11/02	34
Un-ionized Ammonia as N (mg/L)			0.005			11/03	37
Turbidity (NTU)	6.5	7.8	8.9	8.4	8.9	11/04	38
pH	7.4	7.4	7.6	7.6	7.6	11/05	37
D.O. mg/L	6.9	7.2	7.4	7.3	7.2	11/06	37
% Saturation	67	70	72	71	71	11/07	36
Temp (C)	14.3	14.3	14.4	14.4	14.6	11/08	36
Color(Apparent)	BROWN	BROWN	BROWN	BROWN	BROWN	11/09	36
Sulfides (Total)						11/10	37
Sulfides(Dissolved)						11/11	39
Chlorophyll "A"		<	5			11/12	39
Chlorides (mg/L)	4600	5100	6250	5650	6100	11/13	40
						11/14	40
Floating/Susp.(P/A)	A	A	A	A	A	11/15	40
Oil/Grease(PA)	A					11/16	38
Algae(PA)	A					11/17	43
Other Type						11/18	43
Affected Area						11/19	41
Water Depth(ft)	18	18	17	25	20	11/20	82
Sample Depth(ft)	1	1	1	1	1	11/21	109
Odor: (P/A)	A	A	A	A	A	11/22	114
Type						11/23	192
Source						11/24	110
Wildlife	A	A	A	A	A	11/25	79
Fishermen	P	A	A	P	A	11/26	69
Other Rec. Activ.						11/27	61
Date	11/20/96	11/20/96	11/20/96	11/20/96	11/20/96	11/28	57
Time	1315	1310	1305	1300	1250	11/29	54
Analyst	TT	TT	TT	TT	TT	11/30	52
Wind Direction	NONE	NONE	NONE	NONE	NONE		
Wind Speed(Knots)	CALM	CALM	CALM	CALM	CALM		
Air Temp (C)	14.5	14.5	14.5	14.5	14.5		
High Tide Time	0958	0958	0958	0958	0958		
High Tide Height	7.6	7.6	7.6	7.6	7.6		
Low Tide Time	1624	1624	1624	1624	1624		
Low Tide Height	0.9	0.9	0.9	0.9	0.9		



# NAPA SANITATION DISTRICT

December 1996

## Napa River Data/Observation Report

Parameter	CC-1	CC-2	CC-3	CC-4	CC-5	DAY	CC-3 FLOW CFS	DILUTION
Total Coliform (MPN)			3500			12/01	55.59	2.26
Ammonia Nitrogen (mg/L)			0.3			12/02	65.82	10.58
Un-ionized Ammonia as N (mg/L)			0.0026			12/03	61.86	
Turbidity (NTU)	18	18	22	26	23	12/04	58.71	518.87
pH	7.3	7.5	7.5	7.6	7.5	12/05	798.52	74.41
D.O. mg/L	9.3	9	9	8.7	9	12/06	309.24	10.67
% Saturation	82	80	80	77	80	12/07	180.52	6.10
Temp (C)	10.6	10.7	10.6	10.5	10.7	12/08	139.99	4.75
Color(Apparent)	BROWN	BROWN	BROWN	BROWN	BROWN	12/09	248.93	8.72
Sulfides (Total)						12/10	2249	80.97
Sulfides(Dissolved)						12/11	892.67	32.24
Chlorophyll "A"		<	5			12/12	1109	40.78
Chlorides (mg/L)	110	150	150	150	170	12/13	647.67	23.18
						12/14	397.11	14.32
Floating/Susp.(P/A)	A	A	A	A	A	12/15	275.19	9.95
Oil/Grease(PA)	A	A	A	A	A	12/16	214.21	7.55
Algae(PA)	A	A	A	A	A	12/17	178.51	6.48
Other Type						12/18	155.85	5.35
Affected Area						12/19	135.89	16.39
Water Depth(ft)	17	16.7	14.2	23	19.6	12/20	127.51	
Sample Depth(ft)	1	1	1	1	1	12/21	546.43	42.99
Odor: (P/A)	A	A	A	A	A	12/22	654.82	28.69
Type						12/23	809.97	27.30
Source						12/24	524.61	17.72
Wildlife	A	A	A	A	A	12/25	389.09	13.15
Fishermen	A	A	A	A	P	12/26	654.28	21.98
Other Rec. Activ.						12/27	2354	79.09
Date	12/18/96	12/18/96	12/18/96	12/18/96	12/18/96	12/28	1837	61.58
Time	1300	1250	1245	1240	1230	12/29	2598	87.44
Analyst	TT	TT	TT	TT	TT	12/30	4854	163.85
Wind Direction	180	180	180	180	180	12/31	9310	321.23
Wind Speed(Knots)	15	15	15	15	15			
Air Temp (C)	15	15	15	15	15			
High Tide Time	0822	0822	0822	0822	0822			
High Tide Height	8.1	8.2	8.3	8.4	8.5			
Low Tide Time	1520	1521	1522	1523	1524			
Low Tide Height	1.2	1.3	1.4	1.5	1.6			

## Napa River Data/Observation Report

Parameter	CC-1	CC-2	CC-3	CC-4	CC-5	DAY	CC-3 FLOW CFS	DILUTION
Total Coliform (MPN)			1400			1/1/97	20221	677.95
Ammonia Nitrogen (mg/L)			1.2			1/2/97	10866	376.58
Un-ionized Ammonia as N (mg/L)			0.0096			1/3/97	5342	172.57
Turbidity (NTU)	14	16	17	17	25	1/4/97	4608	135.37
pH	7.4	7.6	7.6	7.7	7.7	1/5/97	4608	135.14
D.O. mg/L	10.2	10.3	10.2	10	10.4	1/6/97	3252	95.73
% Saturation	90	91	88	87	90	1/7/97	1183	34.94
Temp (C)	10	10	9.7	9.7	9.4	1/8/97	1019	29.83
Color(Apparent)	BRN	BRN	BRN	BRN	BRN	1/9/97	899.64	28.14
Sulfides (Total)						1/10/97	819.17	23.84
Sulfides(Dissolved)						1/11/97	763.08	22.24
Chlorophyll "A"						1/12/97	730.47	21.31
Chlorides (mg/L)	440	360	410	400	490	1/13/97	732.52	22.38
						1/14/97	600.52	17.52
Floating/Susp.(P/A)	P	P	P	P	P	1/15/97	582.4	17.02
Oil/Grease						1/16/97	554.51	16.43
Algae						1/17/97	529.09	15.50
Other Type	WOOD	WOOD	WOOD	WOOD	WOOD	1/18/97	510.07	14.96
Affected Area	ALL	ALL	ALL	ALL	ALL	1/19/97	496.1	14.57
Water Depth(ft)	24	22	16	28	25	1/20/97	493.03	14.50
Sample Depth(ft)	1	1	1	1	1	1/21/97	515.02	15.17
Odor: (P/A)	A	A	A	A	A	1/22/97	4565	134.67
Type						1/23/97	9610	283.36
Source						1/24/97	3150	93.22
Wildlife	A	A	A	A	A	1/25/97	8386	244.30
Fishermen	A	A	A	A	A	1/26/97	9752	282.17
Other Rec. Activ.						1/27/97	3820	111.09
Date	1/21/97					1/28/97	2313	67.27
Time	1250					1/29/97	1720	50.05
Analyst	TT					1/30/97	1371	40.02
Wind Direction	170					1/31/97	1153	33.47
Wind Speed(Knots)	10							
Air Temp (C)	11							
High Tide Time	11:51							
High Tide Height	7.8							
Low Tide Time	19:09							
Low Tide Height	-.3							

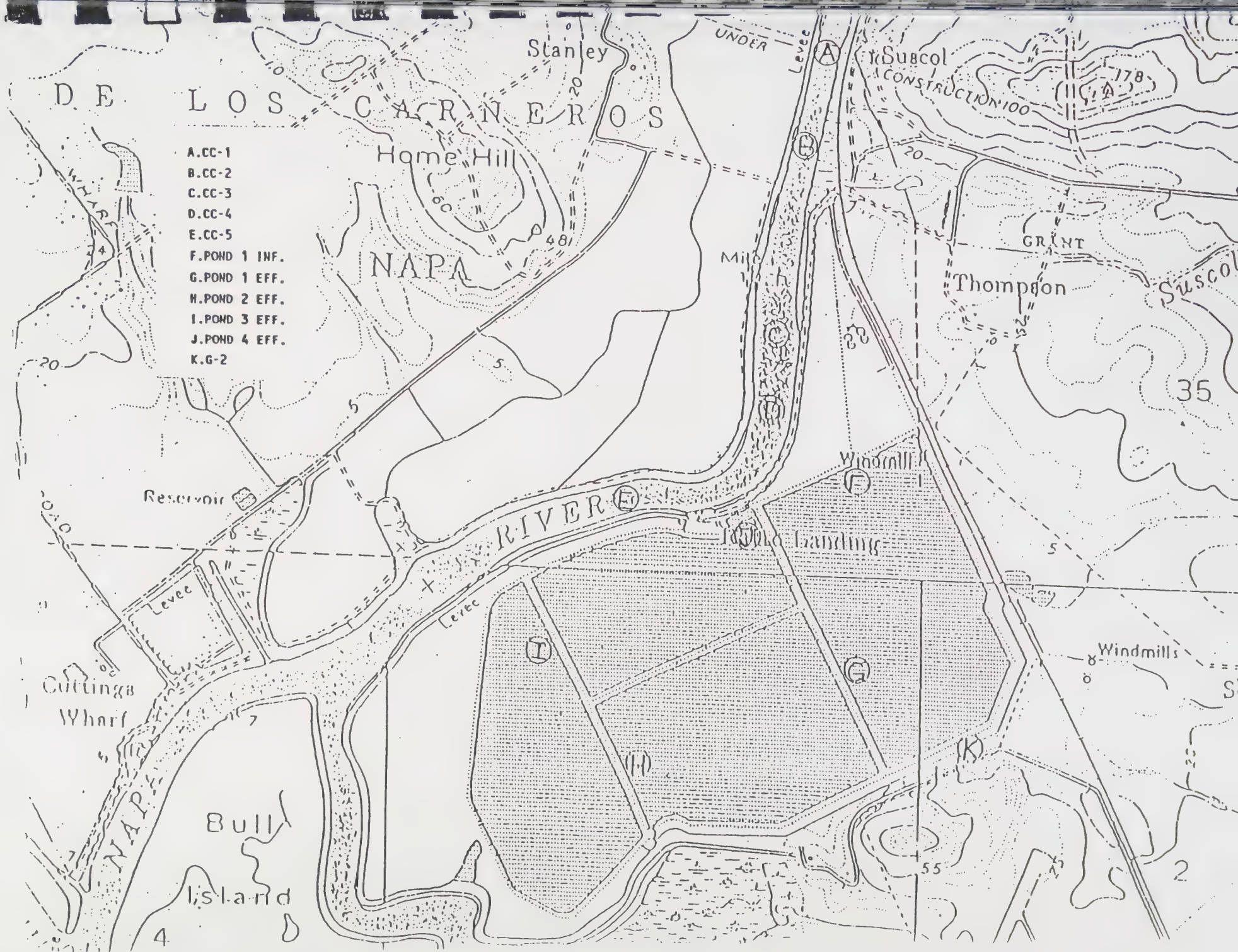
Napa River Data/Observation Report						CC-3		
Parameter	CC-1	CC-2	CC-3	CC-4	CC-5	DAY	FLOW CFS	DILUTION
Total Coliform (MPN)			460			3/1	366.46	18.76
Ammonia Nitrogen (mg/L)			0.4			3/2	370.32	19.18
Un-ionized Ammonia as N (mg/L)		<	0.002			3/3	377.88	19.40
Turbidity (NTU)	11	16	17	18	22	3/4	366.5	18.91
pH	7.6	7.8	7.8	7.9	7.9	3/5	355.26	18.76
D.O. mg/L	9.4	8.7	8.2	8.4	8	3/6	355.26	19.94
% Saturation	97	90	85	89	83	3/7	346.79	19.73
Temp (C)	17	17	17	18	17	3/8	342.13	20.06
Color(Apparent)	BROWN	BROWN	BROWN	BROWN	BROWN	3/9	330.78	21.47
Sulfides (Total)						3/10	331.43	22.03
Sulfides(Dissolved)						3/11	330.05	42.21
Chlorophyll "A"		<	5			3/12	318.98	40.79
Chlorides (mg/L)	260	670	400	470	560	3/13	309.42	55.31
						3/14	308.82	54.11
Floating/Susp.(P/A)	A	A	A	A	A	3/15	307.48	49.73
Oil/Grease	A	A	A	A	A	3/16	303.37	49.07
Algae	A	A	A	A	A	3/17	311.13	32.04
Other Type						3/18	349.76	32.83
Affected Area						3/19	337.38	25.12
Water Depth(ft)	19	15	15	22	15	3/20	331.2	29.67
Sample Depth(ft)	1	1	1	1	1	3/21	327.55	44.18
Odor. (P/A)	A	A	A	A	A	3/22	322.35	51.75
Type						3/23	318.21	22.56
Source						3/24	310.99	35.60
Wildlife	P	A	A	A	A	3/25	306.15	56.42
Fishermen	A	A	A	A	A	3/26	295.59	43.52
Other Rec. Activ.						3/27	290.97	42.00
Date	3/24/97					3/28	286.48	49.41
Time	0905	0910	0915	0920	0925	3/29	284.32	58.25
Analyst	TT/DD	TT/DD	TT/DD	TT/DD	TT/DD	3/30	281.87	104.15
Wind Direction	0	0	0	0	0	3/31	271.14	170.50
Wind Speed(Knots)	0	0	0	0	0			
Air Temp (C)	17.5							
High Tide Time	13:58							
High Tide Height (FT)	6.4							
Low Tide Time	08:06							
Low Tide Height (FT)	08							



## Napa River Data/Observation Report

Parameter	CC-1	CC-2	CC-3	CC-4	CC-5	DAY	FLOW CFS	DILUTION
Total Coliform (MPN)			23			2/1	1016	29.52
Ammonia Nitrogen (mg/L)			0.9			2/2	903.92	26.23
Un-ionized Ammonia as N (mg/L)			0.0024			2/3	816.94	23.71
Turbidity (NTU)	12	14	13	11	13	2/4	868.56	25.31
pH	7.5	7.7	7.7	7.8	7.8	2/5	843.02	25.72
D.O. mg/L	9.4	9.6	9.1	9.5	9.7	2/6	783.19	23.42
% Saturation	89	91	86	90	92	2/7	735.43	21.20
Temp (C)	13.4	13.4	13.4	13.3	13.4	2/8	701.02	20.25
Color(Apparent)	GREEN	GREEN	GREEN	GREEN	GREEN	2/9	664.03	19.22
Sulfides (Total)						2/10	635.19	19.04
Sulfides(Dissolved)						2/11	606.75	17.71
Chlorophyll "A"			<5			2/12	580.45	16.87
Chlorides (mg/L)	80	110	100	86	130	2/13	552.28	16.34
						2/14	532.68	15.45
Floating/Susp.(P/A)	A	A	A	A	A	2/15	516.84	14.99
Oil/Grease	A	A	A	A	A	2/16	505.25	14.68
Algae	A	A	A	A	A	2/17	499.56	14.55
Other Type	A	A	A	A	A	2/18	481.77	14.03
Affected Area	A	A	A	A	A	2/19	464.69	13.57
Water Depth(ft)	21	20	12	25	23	2/20	453.69	13.28
Sample Depth(ft)	1	1	1	1	1	2/21	446.09	13.14
Odor: (P/A)	A	A	A	A	A	2/22	437.75	12.87
Type						2/23	433.24	12.86
Source						2/24	423.52	15.26
Wildlife	A	A	A	A	A	2/25	408.52	19.33
Fishermen	A	A	A	A	A	2/26	403.73	19.15
Other Rec. Activ.						2/27	393.43	18.75
Date	2/19/97					2/28	379.08	18.47
Time	1340	1335	1330	1325	1320			
Analyst	TT	TT	TT	TT	TT			
Wind Direction	250							
Wind Speed(Knots)	12							
Air Temp (C)	15							
High Tide Time	11:34							
High Tide Height	7.4							
Low Tide Time	6:04							
Low Tide Height	0							

Napa River Data/Observation Report						CC-3	
Parameter	CC-1	CC-2	CC-3	CC-4	CC-5	DAY	FLOW CFS DILUTION
Total Coliform (MPN)			500			4/1	261.85 29.87
Ammonia Nitrogen (mg/L)			0.4			4/2	262.85 18.68
Un-ionized Ammonia as N (mg/L)			0.005			4/3	263.85 22.37
Turbidity (NTU)	15	15	17	20	16	4/4	264.85 32.31
pH	7.4	7.6	7.7	7.7	7.7	4/5	265.85 46.13
D.O. mg/L	8	7.5	7.5	7.3	7.3	4/6	266.85 37.22
% Saturation	88	81	81	79	79	4/7	267.85 30.91
Temp (C)	20	19	19	19	19	4/8	268.85 29.41
Color(Apparent)	BROWN	BROWN	BROWN	BROWN	BROWN	4/9	269.85 24.79
Sulfides (Total)						4/10	270.85 45.18
Sulfides(Dissolved)						4/11	271.85 103.78
Chlorophyll "A"		<	5			4/12	272.85 209.81
Chlorides (mg/L)	3470	3300	3750	3940	3500	4/13	273.85 61.01
						4/14	274.85 53.04
Floating/Susp.(P/A)	P	P	P	A	P	4/15	275.85 135.65
Oil/Grease						4/16	276.85 225.52
Algae	X	X	X		X	4/17	277.85 172.86
Other Type						4/18	278.85 37.36
Affected Area	ALL	ALL	ALL		ALL	4/19	279.85 30.50
Water Depth(ft)	22	17	16	24	20	4/20	280.85 35.58
Sample Depth(ft)	1	1	1	1	1	4/21	281.85 33.53
Odor: (P/A)	A	A	A	A	A	4/22	282.85 31.62
Type						4/23	283.85 25.01
Source						4/24	284.85 23.10
Wildlife	A	A	A	A	A	4/25	285.85 37.47
Fishermen	A	A	A	A	A	4/26	286.85 46.73
Other Rec. Activ.						4/27	287.85 47.86
Date	4/23/97	4/23/97	4/23/97	4/23/97	4/23/97	4/28	288.85 40.21
Time	1230	1235	1240	1245	1250	4/29	289.85 41.23
Analyst	TT	TT	TT	TT	TT	4/30	290.85 103.61
Wind Direction	340	340	340	340	340		
Wind Speed(Knots)	9	9	9	9	9		
Air Temp (C)	17	17	17	17	17		
High Tide Time	1538	1538	1538	1538	1538		
High Tide Height	6	6	6	6	6		
Low Tide Time	0917	0917	0917	0917	0917		
Low Tide Height	-2	-2	-2	-2	-2		





**Appendix F (2)**  
**Concept Water Quality Management Plan**  
**(Without Tables, Figures, or Appendices)**



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STANLY RANCH SPECIFIC PLAN  
TECHNICAL APPENDIX:  
WATER QUALITY MANAGEMENT

Prepared for

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## 1. INTRODUCTION

Implementation of the Stanly Ranch Specific Plan will convert undeveloped agricultural land to a combination of residential, resort, golf course, and agricultural uses. This technical appendix to the Specific Plan describes measures to mitigate potential impacts to water quality.

### 1.1 PROJECT OVERVIEW

The specific plan includes the development of a resort, residential neighborhoods, a winery and wine center, an 18-hole golf course, vineyards, orchards, open space, and other facilities (Figure 1). Orchards, which are not shown on Figure 1, will be interspersed among the residential neighborhoods, southeast of Old Soscol Road. The Stanly Ranch Specific Plan provides additional project information.

### 1.2 PURPOSE AND SCOPE OF REPORT

The purpose of this technical appendix is to specify, at the conceptual design level, an integrated system of water quality management measures that will reduce water quality impacts of the proposed Stanly Ranch development to less than significant levels and will meet or exceed federal, state, and local regulatory requirements.

This appendix provides a conceptual plan to address water quality treatment of runoff from all developed areas of the site: urban areas (roads, buildings, and associated areas), the golf course, and agricultural areas (vineyards and orchards). It describes the measures to be implemented to protect stormwater quality, including: identification of potential pollutants and transport mechanisms, preliminary selection of Best Management Practices (BMPs) for water quality management, identification of maintenance responsibilities, and water quality monitoring requirements.

### 1.3 FUTURE PLANNING AND DESIGN

Because the site grading plan and golf course layout are preliminary at the Specific Plan stage, the stormwater quality protection measures are presented at a conceptual plan level. The type, location, and



approximate sizes are provided. As the project design is finalized, water quality management elements of the Specific Plan will be compiled and refined into design-level and operations-level documents and drawings. These further refinements are discussed in the relevant report sections below.

## 2. POTENTIAL WATER QUALITY IMPACTS

### 2.1 DESCRIPTION OF LAND USE

Figure 1 shows an illustrative land use plan for the Stanly Ranch. Implementation of the Stanly Ranch Specific Plan will result in the development of approximately 214 acres of residential, resort/commercial, and major road areas. Resort/commercial areas include the resort buildings and facilities, the winery, and the wine center. An 18-hole golf course is proposed to be constructed on approximately 179 acres of Stanly Ranch highlands. Vineyards are proposed at Stanly Ranch in the winery, wine center, and resort areas. Orchards are proposed to complement residential development in the southwest part of the site (orchards not shown in Figure 1). Golf course, vineyard and orchard irrigation will use reclaimed water (tertiary treated effluent) as available, or a combination of reclaimed and potable municipal water.

### 2.2 REGULATORY SETTING

Discharge of stormwater from developed areas is regulated under the National Pollutant Discharge Elimination System (NPDES) as mandated by the 1987 amendments to the Clean Water Act. In California, the State Water Quality Control Board administers the NPDES program via the Regional Water Quality Control Boards (Regional Boards). In addition, the State Porter-Cologne Act requires the development of Basin Plans for drainage basins within California. The Basin Plans are implemented also through the NPDES program.

The State regulates stormwater quality by requiring stormwater dischargers to use Best Management Practices (BMPs) to control and eliminate sources of pollutants. BMPs are management practices and treatment methods to prevent or reduce stormwater pollution. The State does not require adherence to specific performance standards for discharge (i.e., water quality standards).

The Stanly Ranch project will require an NPDES general permit for stormwater discharge from the San Francisco Bay Regional Board prior to project implementation. The general permit requires submission of a Notice of Intent and preparation of a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP specifies measures to minimize erosion during construction, ongoing measures to prevent or control pollutants in runoff once construction is complete, a monitoring plan for inspection and maintenance, and stormwater quality testing.

The terms of the Specific Plan specify use of reclaimed water (tertiary treated waste water) for golf course, vineyard and orchard irrigation. The Regional Board requires a permit for discharge of tertiary treated waste water. The terms of the discharge permit require that no reclaimed water be discharged to existing wetlands or streams (Leslie Ferguson, personal communication). If the Stanly Ranch uses reclaimed water from Napa Sanitary District, it will operate under the conditions of the District's discharge permit. If the Stanly Ranch uses reclaimed water from its own on-site treatment plant, it will need to have its own discharge permit. Under either scenario, controls will be necessary to prevent runoff of reclaimed water.

### 2.3 POTENTIALLY-AFFECTED HABITATS AND BENEFICIAL USES

Surface and groundwater at the Stanly Ranch support beneficial uses as defined by the Regional Board in the Water Quality Control Plan for the San Francisco Bay Basin (San Francisco Bay Regional Board, 1995), including various types of aquatic habitat. Seasonal wetlands in both the North and South Lowlands provide habitat for migrating shorebirds and waterfowl. The existing stream corridors provide wildlife habitats and corridors for movement. Figure 2 shows the location of jurisdictional (Section 404) wetlands and streams on the Stanly Ranch. The water quality elements of the Specific Plan are designed to protect jurisdictional wetlands and streams from water quality degradation.

Implementation of the Stanly Ranch Specific Plan would result in changes to jurisdictional wetland areas. Less than 3 acres of existing wetlands in the resort area would be filled and mitigated on-site, probably in the upland (non-wetland) areas of the site lowlands. The water quality management elements of the Specific Plan are designed to protect post-development jurisdictional wetlands and will be modified, as necessary, to include the mitigation wetlands.

### 2.4 CONSTITUENTS OF CONCERN

The main water quality constituents of concern from the proposed Stanly Ranch development are: nutrients and pesticides from the golf course, agricultural areas, and landscaped areas; heavy metals, bacteria, viruses, oxygen-demanding substances, and oil and grease from the residential and resort areas; and sediment from agricultural areas, urban areas, and temporary construction activity.



#### 2.4.1 Residential and Resort/Commercial

Runoff from residential and commercial areas typically contains a variety of pollutants, including sediments, nutrients, bacteria and viruses, oxygen-demanding substances, oil and grease, metals, and pesticides. The California Municipal BMP Handbook provides further discussion of urban-development-related contaminants and their sources.

#### 2.4.2 Golf Course

Water quality aspects of golf course construction and operation have received increased attention in recent years. Pollutants of concern include fertilizers (nitrogen and phosphorus) and pesticides (insecticides, herbicides and fungicides) applied to the course and pollutants contained in reclaimed water used for irrigation. These may degrade surface and ground water quality through storm runoff and groundwater leaching if not adequately controlled.

#### 2.4.3 Agriculture

Vineyards and orchards have the potential to degrade surface water quality by discharging eroded soil, nutrients, pesticides, and pollutants contained in reclaimed water used for irrigation.

### 3. WATER QUALITY MANAGEMENT APPROACH AND GOALS

The Stanly Ranch will use Best Management Practices (BMPs) to mitigate potential water quality impacts from the proposed development. BMPs are typically divided into two types: source control and treatment control:

- **Source control BMPs.** Operational practices that prevent pollution by reducing potential pollutants at the source. They typically do not require construction.
- **Treatment control BMPs.** Methods of treatment to remove pollutants from stormwater prior to discharge to sensitive areas (wetlands and streams). They require construction and maintenance for implementation.

The Specific Plan emphasizes the use of source control BMPs, with treatment control BMPs providing additional protection. For treatment control, multi-objective, biotechnical BMPs are recommended over more structural (non-vegetated) methods, in keeping with the resource conservation, aesthetic, and recreational objectives and policies of the Specific Plan.

#### 3.1 WATER QUALITY MANAGEMENT GOALS

BMPs were selected to achieve the following water quality management goals:

- minimize increases in surface runoff from impervious areas;
- protect against erosion;
- protect wetland and stream habitats;
- minimize irrigation water application and runoff;
- ensure that no reclaimed water (for irrigation) is discharged from the developed areas;
- minimize the application of nutrients and pesticides;
- protect against runoff of applied fertilizers and pesticides;
- when pesticides are used, use the least toxic type suitable;
- prevent spills of toxic chemicals;
- prevent inappropriate substances from entering runoff (litter, oils, fuels, solvents, etc.);

- treat all runoff prior to discharge to wetlands/streams (i.e., vegetated treatment ponds, treatment wetlands, biofilters, etc.).

## 3.2 BASIS FOR BMP SELECTION

### 3.2.1 Residential and Resort/Commercial

The urban runoff treatment methods proposed in the Stanly Ranch Specific Plan conform with the *San Francisco Bay Regional Water Quality Control Board Staff Recommendations for New and Redevelopment Controls for Storm Water Programs*, February 1994 (*Regional Board Recommendations*). At present, the recommended water quality plan procedures result from a combination of the *Regional Board Recommendations* and the *California Stormwater Best Management Practices Handbooks*.

Tables 2 and 4 in the *Regional Board Recommendations* (Appendix A) provide summaries of recommended residential and commercial post-construction BMPs. All applicable BMPs from these tables will be implemented at the Stanly Ranch. Residential BMPs will apply to the residential portions of the site and commercial BMPs to the proposed winery, wine center, and resort areas (BMPs for the golf course portion of the resort are handled separately).

Some areas of the site qualify as “sensitive areas,” defined by the Regional Board as areas in which the limit of impervious area will be located less than 200 feet from wetlands or streams. This includes the winery, wine center, and lower parts of the residential development near existing wetlands and Section 404 waters. In accordance with the Regional Board guidelines, sensitive area BMPs will be used in these areas. In addition, sensitive area BMPs will also be used in other areas as applicable and feasible. For example, roof downspout systems will be used throughout the site and swales, vegetated filter strips, and water quality monitoring are proposed for many areas of the site not classified as sensitive.

### 3.2.2 Golf Course

Recommended golf course BMPs were selected based on guidelines developed by the Golf and the Environment Project (Center for Resource Management, 1996), Community & Environmental Defense Associates (Klein 1990), and Baltimore County (1989), and based on similar water quality management plans developed for other California golf courses (Shapell Industries, 1996; Golf Ventures International and Jones & Stokes Associates, 1996; White *et al.*, 1996). Neither the State of California nor Napa County has water quality regulations or requirements specific to golf courses. When reclaimed water is used to irrigate



the golf course, Stanly Ranch will need to comply with the Regional Board's waste water discharge permitting requirements (no discharge allowed).

Construction and operation of the golf course will conform with current standards of professional care as set by the United States Golf Association and the Golf Course Superintendents Association of America.

### 3.2.3 Agriculture

We used the following two regional guidance documents for preliminary vineyard BMP selection: Napa County Resource Conservation District's *Hillside Vineyard Manual* (Appendix B of the *Napa River Watershed Owner's Manual* [NCRCD, 1994]) and Southern Sonoma County Resource Conservation District's *Vineyard Management Practices: an Environmental Approach to Development and Maintenance* (SSCRCD, 1993).

In the absence of BMPs specific to orchards, we have applied general agricultural BMPs from the *California Stormwater BMP Handbooks* and vineyard BMP guidance documents.

Discharge of reclaimed water used for irrigation will need to comply with the Regional Board's waste water discharge permitting requirements (no discharge allowed).

## 4. SPECIFIC PLAN ELEMENTS

This section presents source control and treatment control methods proposed for implementation at the Stanly Ranch. The identification of BMPs is preliminary and will be finalized based upon site-specific considerations identified during the design phase.

The Specific Plan recommends a combination of structural, operational, and biological approaches to golf course maintenance, in place of chemical applications, as possible. This includes use of Integrated Pest Management (IPM), native vegetation, irrigation control, and vegetated stormwater treatment to reduce environmental impacts.

This section discusses post-construction BMPs only. It is also important, however, to use BMPs to minimize potential water quality impacts from construction activity (primarily protections against soil erosion). Standardized procedures exist for selecting construction-phase BMPs (Camp Dresser & McKee *et al.* 1993). These BMPs will be specified during the design phase, once more detailed grading plans have been developed, and will be included in the SWPPP.

### 4.1 SOURCE CONTROL BMPS

#### 4.1.1 All Areas

- **Stream erosion control.** All point discharge of stormwater runoff will pass through an erosion-control structure such as an energy dissipater prior to entering a stream or wetland.

#### 4.1.2 Residential and Resort/Commercial

- **Education/Training.** Information on good housekeeping of hazardous products, proper use and disposal for hazardous products, and prohibited discharge practices and materials will be provided to neighborhood residents by the property owner association or other management agency to be identified.

- **Landscape controls.** The Stanly Ranch Specific Plan includes provisions for use of efficient irrigation and incorporation of native vegetation, to minimize the application of water, nutrients, and pesticides.
- **Litter Control.** Trash management and litter control will include litter patrol, emptying trash receptacles in common areas, and noting trash disposal violations by homeowner or businesses and reporting the violations to the association for investigation.
- **Labeling Storm Drain Facilities.** The phrase “No Dumping—Drains to Bay,” or an equally effective phrase, must be labeled on new storm drain inlets to alert the public to the destination of storm water and to prevent direct discharge of pollutants into the storm drain. Water courses should be similarly labeled by posting signs.
- **Porous paving.** Porous paving will be used in areas such as walkways, patios, and overflow parking areas to minimize increases in stormwater runoff associated with impervious acreage.
- **Minimize runoff contribution to storm drains from areas not used in automobile-related activities.** Design landscaping, patios, and roof drainage to minimize the direct connection of flow from these surfaces to the street drains.
- **Restaurant grease control.** Restaurants will follow proper precautions to prevent discharge of grease into storm drainage. See Appendix A for additional description.
- **Trash control.** Trash enclosures and dumpster areas must be covered and protected from roof and surface drainage. See Appendix A for additional description.
- **Cleaning, maintenance and processing control.** Areas used for washing, steam cleaning, maintenance, repair or processing must have impermeable surfaces and containment berms, roof covers, recycled water wash facility, and discharge to the sanitary sewer. See Appendix A for additional description.
- **Fuel dispensing controls.** Fuel dispensing areas must be on impermeable surfaces and covered. See Appendix A for additional description.



- **Outdoor storage controls.** Oils, fuels, solvents, coolants, and other chemicals stored outdoors must be in containers and protected from drainage by secondary containment structures such as berms and roof covers. See Appendix A for additional description.
- **Loading dock controls.** Loading docks will be constructed to prevent drainage onto or from the area. See Appendix A for additional description.
- **Roof downspout system.** Roof runoff will be routed to pervious areas for infiltration, rather than directly to the street drainage system.
- **Street sweeping.** Streets and parking lots will be swept immediately prior to and once during the storm season.
- **Storm drain maintenance.** Storm drain facilities will be inspected at least twice each year and cleaned immediately prior to and once during the storm season.
- **Common car wash area.** A common car wash area will be provided for use in the employee housing area (54 units of multi-family residential).

#### 4.1.3 Golf Course

- **General irrigation system controls.** The following irrigation controls will be used to reduce/prevent runoff and promote water conservation:
  - a flexible irrigation system will allow the golf course superintendent to control water application to suit different areas of the course. Irrigation head controls will be used to limit water application for each microclimate to the amount necessary to offset evapotranspiration;
  - monitoring, and other methods to manage irrigation, prevent over- or under-watering;
  - avoid watering when rain is forecast to occur before irrigation water would have time to infiltrate into the soil.

- **Reclaimed water irrigation system controls.** When reclaimed water is used for irrigation, the irrigation and drainage systems will be designed to prevent discharge of reclaimed water to existing wetlands and streams. In addition to the measures listed above under “General Irrigation System Controls,” the following measures will also be implemented:
  - reclaimed-water irrigated areas within approximately 50 to 150 feet of wetlands and streams will drain to treatment ponds, treatment wetlands, biofilters, or infiltration controls to avoid direct discharge to wetlands and streams; treatment ponds, treatment wetlands, and biofilters are discussed in Sections 4.2 and 5; infiltration controls include small infiltration ponds (integrated in the golf course design), french drains, and infiltration buffers (pervious, vegetated areas, not irrigated);
  - soil moisture sensors will be used to avoid over watering.
- **Native vegetation.** Native trees and grasses will be incorporated into the golf course design as feasible to minimize water, nutrient, and pesticide application requirements.
- **Stream and wetland protection.** These areas will be designated as unplayable rough.
- **Turfgrass selection.** Turfgrass type will be selected to minimize fertilizer and pesticide use.
- **Controlled timing of fertilizer application.** Avoid applying fertilizers if rain is forecast to occur within 24 hours. This will give fertilizers time to infiltrate into the soil. The majority of fertilizer application will occur during the dry season (April - November), when the need is highest.
- **Integrated Pest Management (IPM).** An IPM program will be used to reduce pesticide applications and minimize the environmental impacts of pesticides used. According to Klein (1990), an effective IPM program for a golf course consists of three parts: prevention, monitoring, and control.
  - Preventing pests from invading a golf course can be achieved through proper selection of turfgrass varieties which have a high resistance to disease and insects;
  - Monitoring can reduce the need for pesticides by allowing the golf course manager to detect problems as they develop, while they are still small;

- Monitoring can reduce the need for pesticides by allowing the golf course manager to detect problems as they develop, while they are still small;
- The control strategy offers a number of pest management tools in addition to conventional pesticides. These tools are used on a curative basis, with application occurring only on the specific site where the pest has appeared.
- **Pesticide selection criteria.** Pesticides shall be selected based on the following criteria:
  - use the least toxic type suitable;
  - use only pesticides with a short to intermediate half-life;
  - use only pesticides approved by the local governing agency;
  - rotate pesticide formulae to avoid development of pesticide resistant pathogens.
- **Pesticide application methods.** When pesticide use is required, the following precautions should be taken:
  - use only the minimal amount necessary;
  - follow manufacturer's instructions, applicable laws and regulations;
  - have a licensed applicator be responsible for all pesticide policy and applications;
  - apply pesticides in a manner that minimizes drift/loss, such as using hooded sprayers, applying chemicals when weather conditions are favorable (winds below 5 mph and dry weather forecast), and using spray adjuvants if needed to prevent runoff. Spray adjuvants make pesticides waterfast once the spray dries.
- **Adhere to proper storage, handling, and disposal methods for fertilizers and pesticides.**

#### 4.1.4 Agriculture

Recommended vineyard and orchard BMPs include:

- **Vegetative floor management/cover crops.** These will be used to minimize pesticide use, increase infiltration, and reduce erosion.

Additional erosion control measures will be specified during vineyard and orchard design.



The following golf course source control BMPs also apply to the agricultural areas:

- **General irrigation system controls.**
- **Reclaimed water irrigation system controls.**
- **Controlled timing of fertilizer application.**
- **Pesticide selection criteria.**
- **Pesticide application methods.**
- **Adhere to proper storage, handling, and disposal methods for fertilizers and pesticides.**

## 4.2 TREATMENT CONTROL BMPS

All stormwater runoff and incidental runoff of reclaimed irrigation water will be treated prior to discharge to existing wetlands or creeks. Vegetated stormwater treatment methods are recommended for the site since they are congruent with the resource conservation, aesthetic, and recreational objectives and policies of the Specific Plan. Vegetated treatment methods, in particular constructed wetlands, have been promoted by the California Regional Water Quality Control Board San Francisco Bay Region (Resolution 94-102, August 1994) for urban runoff pollution control.

Stormwater treatment at Stanly Ranch will be provided through a combination of vegetated treatment ponds, treatment wetlands, biofilter swales, and biofilter strips. These are discussed below.

### 4.2.1 Description of Treatment BMPS

A *treatment pond* is essentially a detention basin with a permanent water pool (Figure 3). The pool provides a quiescent volume for settling of solids and uptake of dissolved contaminants by aquatic plants. Wetland vegetation around the edges of the pond provides additional removal of dissolved pollutants.

A constructed *treatment wetland* is similar to a wet pond but contains more wetland vegetation and shallow areas (Figure 3). Pollutants are removed by settling, filtration, microbial decomposition, and biological assimilation. Constructed wetlands may provide a higher rate of pollutant removal than wet ponds but are

more difficult to build and maintain. Both hydrologic and ecologic expertise are required in the design and implementation.

A *biofilter swale* is a vegetated channel that treats concentrated flow. Biofilter swales are similar to drainage ditches but are generally wider and sized to create shallow flow conditions. A *biofilter strip* consists of a surface of even and relatively flat vegetated land. Runoff passes through the strip as a shallow sheet flow. Biofilter vegetation should be irrigated, and should not be treated with fertilizers or pesticides. Turfgrass is a common biofilter vegetation. Figure 4 shows a conceptual design of a biofilter swale and biofilter strip.

Biofilter strips are not to be confused with vegetated buffers and setbacks (Metropolitan Washington Council of Governments, 1995). Although one of the purposes of a vegetated buffer is to provide water quality benefits, another important purpose is to maintain a “green corridor” along a water body. Buffers are usually vegetated with trees and shrubs, rather than turfgrass. Setbacks separate one land use type from another and are generally established for aesthetic reasons. Both biofilter strips and setbacks could be considered types of buffers.

#### 4.2.2 Sizing/Design Criteria

Treatment ponds/wetlands, biofilter swales, and biofilter strips were preliminarily sized using the methods provided in the *California Municipal BMP Handbook*. Additional pond/wetland sizing information is presented in Appendix B. More detailed sizing will be conducted during the final design.

Treatment ponds and wetlands are sized to collect and treat runoff from 2-year and smaller storm events. Runoff from larger storm events are passed through the pond or wetland in an overflow system. For 2-year and smaller storm events, routing runoff through treatment ponds and wetlands will reduce post-development peak flows to (or below) pre-development levels.

##### 4.2.2.1 *Treatment Ponds*

Constructed ponds are sized to store about three times the runoff volume from the mean annual storm. This provides approximately 80% suspended solids removal. A forebay covering 10 to 25% of the surface area should be included for pretreatment and periodic removal of accumulated sediment. The ponds are assumed to have an average depth of four feet, excluding any standing pool. We consider this to be a conservative assumption; actual depth could be increased as necessary.

#### 4.2.2.2 Treatment Wetlands

The total area of the wetland treatment ponds should be about 1% to 2% of the drainage area. At the Specific Plan phase, we have used the larger (2%) sizing criteria to allow for some uncertainty in wetland design. A deep forebay (3 to 6 feet) provides pretreatment and access for maintenance dredging, with a second deep pool constructed near an outlet.

#### 4.2.2.3 Biofilter Swales and Strips

For the Stanly Ranch, biofilter area should generally equal 1000 square feet of per impervious acre treated. Longitudinal slope should not exceed 5%. Biofilter swale width depends on several factors (contributing area, slope, vegetative roughness) and generally is at least 3 to 12 feet. Biofilter strip width (in the direction of flow) should be greater than 10 feet and should generally be about 20 to 50 feet or more.

### 4.3 DESIGN- AND OPERATIONS-PHASE COMPONENTS

The design phase will include preparation of a Chemical Application Management Plan (CHAMP) for the golf course and landscaped areas. The CHAMP will include BMPs designed to reduce stormwater quality impacts from the golf course to a less than significant level. It will contain the following elements (White *et al.*, 1996):

- assessment of potentially-affected habitats, species, resources, and beneficial uses;
- identification of constituents and transport pathways of concern;
- quantification of chemical loading, including loading of treated effluent (waste water) used for golf course irrigation;
- identification of applicable regulations and permit requirements;
- evaluation and recommendation of alternative control strategies and BMPs;
- integration of golf course design with urban runoff stormwater quality plan;
- monitoring and reporting recommendations; and
- guidelines for adaptive management in response to BMP performance.

The golf course design and CHAMP will be reviewed and approved by a water quality specialist engineer or other California-registered professional with appropriate expertise prior to beginning construction.



#### 4.4 FACILITIES INSPECTION AND MAINTENANCE

A detailed inspection and maintenance plan for the treatment controls will be developed prior to construction. This will include development of an inspection schedule (frequency/timing) and listing of inspection and maintenance activities. Maintenance for the ponds / wetlands will include removing foreign debris and sediment buildup, repairing areas of bank erosion, repairing conveyance systems and discharge structures, removing undesired “nuisance” plant species, controlling mosquitos, and harvesting wetland vegetation. Vegetation harvesting is necessary to renew the ability of the plants to remove pollutants. Pond / wetland inspection will be completed at least annually and after each extreme storm event.

The ponds / wetlands will be designed with a forebay to trap debris and larger sediments, facilitating periodic maintenance. Deposits will be removed from the forebay when a loss of capacity is significant. We estimate that a total of 2,000 to 3,000 cubic yards of accumulated deposits will need to be removed approximately every 3 to 5 years or more. The exact timing of periodic maintenance will depend on the rate of sediment accumulation. Road access to the ponds/wetlands for maintenance will be incorporated into the golf cart path design.

Selected sediment monitoring for potential stormwater contaminants will be conducted annually for a minimum of five years. The sampling will be coordinated with the water quality monitoring described in Section 6 and will be part of the Stanly Ranch Mitigation Monitoring and Reporting Program (MMRP), described in the main body of the Specific Plan. Sampling will be used to monitor and adaptively manage detention basin performance and to verify contaminant levels prior to disposal. Sediments will be disposed of onsite or at an appropriate disposal facility. According to the *California Municipal BMP Handbook*, limited studies of accumulated sediments indicate that toxicity limits specified by final disposal regulations are not exceeded. If, after five years, sediment monitoring shows that contaminant levels are significantly below those which would require special disposal arrangements, monitoring will be discontinued at that time. If, however, sediment pollutant levels remain high, monitoring will continue as needed to provide input to adaptive management of source control BMPs and to ensure appropriate sediment disposal measures.

Constructed ponds/wetlands, biofilter swales, and biofilter strips receiving runoff from the golf course areas will be inspected and maintained by the resort operator or other management agency to be identified. Biofilter swales and biofilter strips near the winery and wine center are outside of the golf course drainage and will be inspected and maintained by the winery and wine center operator or other management agency to be identified.

## 5. INTEGRATION OF STORMWATER TREATMENT ELEMENTS

Plate 1 provides an illustrative version of the proposed water quality management plan. Treatment controls are located such that runoff from urban, golf course, and agricultural areas of the site is treated before entering existing wetlands or streams. Site topography and drainage basins are shown in Figure 5. Table 1 summarizes the treatment methods proposed for each drainage basin and the appropriate sizing and capacity of each facility.

Treatment ponds or wetlands will be used to treat stormwater from the residential/resort storm drain system. Many areas of the golf course will drain overland to proposed pond/wetland locations and will be treated with the runoff from residential/resort areas. Runoff from all areas not draining to the treatment ponds/wetlands (portions of the golf course, orchards, and vineyards), will be treated using biofilter swales and biofilter strips. In addition, biofilters will be used where possible upstream of the treatment ponds/wetlands to convey stormwater within the golf course. Existing wetlands and any mitigation wetlands will not be used for stormwater treatment.

Since orchards and vineyards are not shown on Plate 1, treatment of runoff from these areas is discussed here. Runoff from the orchards will drain to the treatment controls shown on Plate 1 for the golf course and residences in the area southeast of Old Soscol Road. Runoff from vineyards in the resort area will drain to the treatment pond or wetland in the resort area. Stormwater treatment for vineyards located in the panhandle is discussed in Section 5.2 below.

### 5.1 TREATMENT PONDS AND WETLANDS

Both treatment ponds and wetlands can be used as water hazards in the golf course and as aesthetic features. Measures may be required to ensure that the facilities remain aesthetically compatible in high visibility areas. This may include screening to capture floating debris and more active management to control water levels, prevent algal blooms, and maintain vegetative cover.

To maintain vegetation and pond volumes, both types of facilities will require supplemental water in the summer. If reclaimed water is used to maintain a permanent pool, controls will be implemented to prevent direct discharge of reclaimed water from the treatment ponds/wetlands. Potential controls include: designing

ponds/wetlands to ensure adequate dilution of reclaimed water with storm runoff prior to discharge, or replacing reclaimed pond/wetland water with municipal water prior to the beginning of the rainy season.

In addition, if reclaimed water is used to maintain a permanent pool, the Regional Board may require that treatment ponds and wetlands be protected from Napa River 100-year flooding to prevent mixing of flood waters and reclaimed water (Leslie Ferguson, personal communication). This can be achieved by using one-way flap gates at the pond/wetland outlets.

## 5.2 BIOFILTERS

A 50-foot wide biofilter band will be located between the golf course/orchard/vineyard areas and wetland/stream areas. As shown on Plate 1, the biofilter band between the golf course and the wetlands will be located closer to the golf holes and further from the wetlands, as feasible. Since this biofilter band will generally follow the natural contour of the hillside bordering the wetlands and streams, it cannot technically be considered a biofilter strip (strips are graded to be relatively flat). Some portions of the biofilter band, along the convex areas of the natural hillside, will function similarly to biofilter strips. Other portions, along the concave areas, will function more like biofilter swales.

The recommended width of this biofilter band (50 feet) was selected to provide adequate treatment for areas that will require the most treatment, the concave areas where flow will be most concentrated. Appendix B contains additional biofilter sizing information. Fifty feet is the minimum width recommended for water quality treatment purposes. A wider buffer may be necessary for biological protection.

Where the preliminary golf course layout does not allow adequate space for placement of a biofilter between the golf green and wetland (holes #11, 13, and 14), one or more of the following approaches will be used to ensure treatment of runoff:

- re-size or re-locate the golf green to allow placement of a 50 feet biofilter between the golf green and wetland;
- Modify the natural gradient to redirect runoff away from the wetland; grade the green to direct runoff to treatment ponds/wetlands or biofilters prior to discharge to wetlands;
- use a sub-surface drain to direct runoff to treatment areas prior to discharge to wetlands.

Biofilters for vineyards in the panhandle area will be located on the lower edges of fields and adjacent to wetlands and streams.



## 6. WATER QUALITY MONITORING

Surface water and groundwater quality will be monitored before and after golf course construction. Pre-construction monitoring will be used to estimate baseline conditions. Post-construction monitoring will be used to evaluate the effects of the golf course development and operation on water quality.

Post-construction monitoring will continue for a minimum of five years. If, after five years, monitoring shows that BMPs have been successful in reducing the discharge of pollutants of concern to less than significant levels, monitoring will be discontinued at that time. If, however, pollutant discharge levels remain significant, additional measures shall be implemented to lower pollutant discharges to below target levels.

A water quality monitoring plan will be developed during the design phase and will specify monitoring locations, frequency, constituents of concern, and target levels. Monitoring locations and frequency will be specified to provide a representative characterization of runoff quality.

Monitoring results will be reported to the Regional Board (surface water monitoring and reporting are provisions of the SWPPP). The Regional Board has the authority to review water quality testing results and impose appropriate corrective measures. In addition, water quality monitoring will be part of the Stanly Ranch Mitigation Monitoring and Reporting Program (MMRP), described in the main body of the Specific Plan. The MMRP will monitor the effectiveness of each mitigation measure over time in accomplishing its purpose. If the MMRP determines that a mitigation measure is proving not to be effective, then the MMRP will replace the measure with an effective measure. The Stanly Ranch Community Owners Association will be responsible for implementing the MMRP.

Unless there are elevated levels of pesticides already present in runoff from the site, it is a reasonable expectation that post-development concentrations of pesticides will be non-detectable. Nutrient levels in runoff from the site are likely elevated under existing conditions due to cattle grazing. Since implementation of the Specific Plan will reduce or eliminate grazing, we expect no net increase in nutrient concentrations in stormwater runoff as a result of the project.

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**Appendix G**  
**CONCEPTUAL WETLAND MITIGATION PLAN**

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# CONCEPTUAL WETLAND MITIGATION PLAN

FOR

STANLY RANCH  
NAPA COUNTY, CALIFORNIA

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Prepared for:

Stanly Ranch

Prepared by:

Wetlands Research Associates, Inc.  
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May 1, 1998





# STANLY RANCH CONCEPTUAL WETLANDS MITIGATION PLAN

## I. INTRODUCTION

The Stanly Ranch Study Area covers approximately 918 acres along the Napa River in southern Napa County and immediately south of the intersection of Highways 12, 29 and 121 (Figure 1). The property is bisected by Highway 29 and Highway 12. The property is entirely within the City of Napa Rural Urban Limit Line, and has been designated in the most recent City of Napa General Plan, Draft Policy Document as suitable for residential, tourist, commercial, and public serving uses.

Stanly Ranch has two distinct areas: Highlands consisting of gentle hills and drainage swales and Lowlands that lie between the Highlands and the Napa River levees. Development is proposed for the Highlands while the Lowlands are to be retained as natural open space. The Lowlands are predominantly wetlands covering over 350 acres, which include some areas of uplands that do not meet Corps of Engineers criteria for wetlands and are not subject to Corps jurisdiction.

The development project will be a destination resort and recreation-oriented community focused on open space amenities such as golf and tennis. The community will be concentrated in three primary areas in the Highlands of the site: (1) the "panhandle" which is proposed to have a commercial wine center and winery; (2) the resort site with lodge and golf course located north of Old Suscol Road; and (3) a variety of residential neighborhoods and associated golf course located southwest of Old Suscol Road.

## II. IMPACTS

The proposed project will result in impacts to jurisdictional wetlands (Figure 2) totalling approximately 1.70 acres (0.2 percent of total land area; 0.5 percent of total wetlands area). Wetlands will be impacted by permanent fill, however, compensatory mitigation will replace the affected wetlands at a 1:1 ratio. Wetlands that will be affected by filling due to several components of the proposed project include:

• Stanly Lane widening	900 square feet (0.02 acre)
• Central swale sedimentation basin, EVA access, street crossing, and golf course	47,135 square feet (1.08 acre)
• Resort lodge swale	20,473 square feet (0.47 acre)
• Ephemeral drainage (golf course hole 10)	800 square feet (0.02 acre)
• Sewage treatment ponds access road	<u>4800 square feet (0.11 acre)</u>
Total	74,108 square feet (1.70 acres)

### III. TYPES OF IMPACTED WETLANDS

The areas where the applicant proposes to place fill materials are classified as freshwater seasonal wetlands, swales and depressional wetlands, and one ephemeral drainage. The duration of saturation varies for each wetland, although all the wetlands impacted are seasonal wetlands. Some of the wetlands function as water discharge/recharge and flood desynchronization areas. Vegetated wetlands can also trap sediments, and retain nutrients that can be directly and indirectly utilized for aquatic species incorporated into the food chain. These wetlands also provide habitat for aquatic organisms and wildlife species.

### IV. LOCATION AND SIZE OF PROPOSED MITIGATION AREA

An extensive area is available for wetlands mitigation in the North Lowlands (Figure 2). Upland islands surrounded by existing wetlands and other areas adjacent to existing wetlands could be excavated to elevations that would have wetland hydrology and support wetland plants. For example, the two areas identified in the North Lowlands (Figure 2) as possible mitigation areas total approximately 3.5 acres. The mitigation plan proposes the creation of seasonal wetlands at a ratio of 1:1 in the North Lowlands as replacement for the filling of wetlands elsewhere on the property, and therefore would only require 1.70 acres. A 1:1 mitigation ratio will be adequate in the North Lowlands as additional wetlands created in this area will result in an increase in the functions and values of the existing seasonal wetlands, including sediment/toxicant retention, flood desynchronization, and nutrient removal and transformation.

### V. CREATION OF WETLAND HABITAT

The proposed mitigation sites have a high probability of success. These areas are adjacent to existing wetlands and it will be relatively easy to create wetland conditions. In these areas, approximately one to three feet of soil would be excavated to reach the same elevation as adjacent wetlands and promote saturation and ponding.

Soils from the wetlands that are to be filled will be collected and transported to the mitigation wetlands. It is expected that these wetland soils will provide a natural wetland vegetation seed bank. The compensatory wetlands are expected to naturally re-vegetate as adjacent areas with existing vegetation will provide seed as well. Additional seed, such as meadow barley (*Hordeum branchyantherum*, a native found on site), will also be applied to promote colonization of native plants and discourage invasion by exotic plants.

## **VI. SUCCESS OF MITIGATION AREA**

Performance criteria will require that the mitigation sites, at a minimum, will meet wetland criteria determined by the Corps of Engineers. Created wetlands will be dominated by wetland vegetation ( $\geq 50\%$  of dominant species present), will maintain inundated or saturated soils for a minimum of five percent of the growing season, and will develop soils characteristic of wetlands. The principal water source for the mitigation sites will be precipitation and runoff. Ponding will occur during the winter/spring wet season, and the wetlands will become seasonally dry during summer and fall.

## **VII. SCHEDULE**

Construction of mitigation wetlands will commence so that they are completed as the individual wetland areas are filled.

## **VII. MONITORING AND REPORTING**

A comprehensive monitoring program will be implemented at the wetland mitigation site, and will include the various measures of the Mitigation Monitoring and Reporting Program that is adopted by the City of Napa and related to the Stanly Ranch EIR. Annual reports that discuss vegetative cover, natural recruitment, and notations on any problems with flooding, sedimentation, vandalism, and/or other general causes of poor survival or wetland degradation will be addressed. After five years, a wetland delineation using Corps' methodology will be conducted and a final report will be prepared that gives results of the delineation and describes the performance of the mitigation. The report will also include an evaluation of the success of any necessary corrective measures that had been undertaken. The report will be submitted to the City of Napa, the Corps of Engineers, and interested agencies.



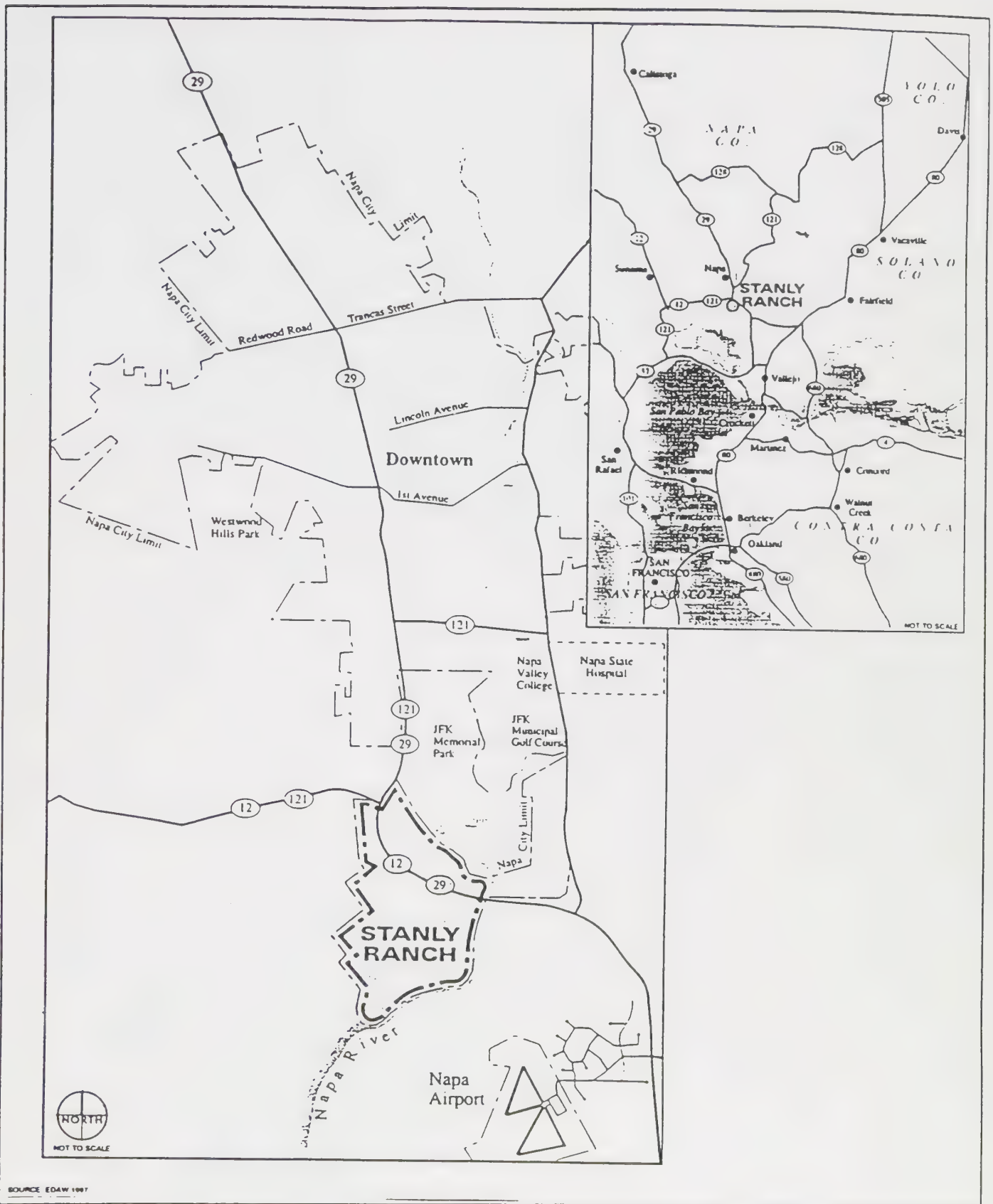


Figure 1. Map showing the location of Stanly Ranch.



Wetlands Research Associates, Inc.



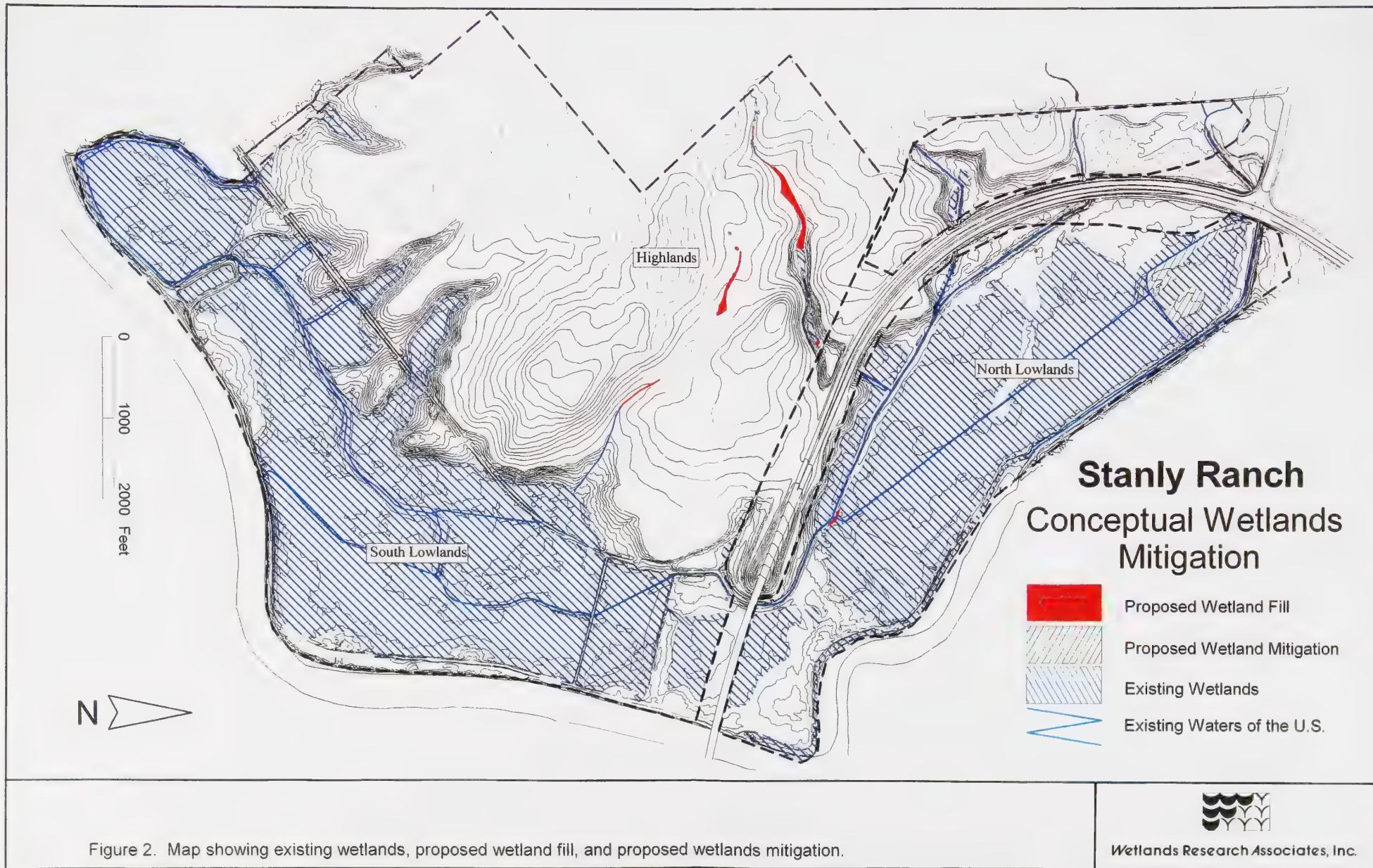


Figure 2. Map showing existing wetlands, proposed wetland fill, and proposed wetlands mitigation.





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**Appendix H**  
**FUNDAMENTAL CONCEPTS OF**  
**ENVIRONMENTAL ACOUSTICS**

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## APPENDIX H: FUNDAMENTAL CONCEPTS OF ENVIRONMENTAL ACOUSTICS

Noise may be defined as unwanted sound. Noise is usually objectionable because it is disturbing or annoying. The objectionable nature of sound could be caused by its *pitch* or its loudness. *Pitch* is the height or depth of a tone or sound, depending on the relative rapidity (frequency) of the vibrations by which it is produced. Higher pitched signals sound louder to humans than sounds with a lower pitch. *Loudness* is intensity of sound waves combined with the reception characteristics of the ear. Intensity may be compared with the height of an ocean wave in that it is a measure of the amplitude of the sound wave.

In addition to the concepts of pitch and loudness, there are several noise measurement scales which are used to describe noise in a particular location. *A decibel (dB)* is a unit of measurement which indicates the relative amplitude of a sound. The zero on the decibel scale is based on the lowest sound level that the healthy, unimpaired human ear can detect. Sound levels in decibels are calculated on a logarithmic basis. An increase of 10 decibels represents a ten-fold increase in acoustic energy, while 20 decibels is 100 times more intense, 30 decibels is 1,000 times more intense, etc. There is a relationship between the subjective noisiness or loudness of a sound and its intensity. Each 10 decibel increase in sound level is perceived as approximately a doubling of loudness over a fairly wide range of intensities. Technical terms are defined in Table E-1.

There are several methods of characterizing sound. The most common in California is the *A-weighted sound level or dBA*. This scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. Representative outdoor and indoor noise levels in units of dBA are shown in Table E-2. Because sound levels can vary markedly over a short period of time, a method for describing either the average character of the sound or the statistical behavior of the variations must be utilized. Most commonly, environmental sounds are described in terms of an average level that has the same acoustical energy as the summation of all the time-varying events. This energy-equivalent sound/noise descriptor is called  $L_{eq}$ . The most common averaging period is hourly, but  $L_{eq}$  can describe any series of noise events of arbitrary duration.



TERM	DEFINITIONS
Decibel, dB	A unit describing the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure, which is 20 micropascals (20 micronewtons per square meter).
Frequency, Hz	The number of complete pressure fluctuations per second above and below atmospheric pressure.
A-Weighted Sound Level, dBA	The sound pressure level in decibels as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise. All sound levels in this report are A-weighted, unless reported otherwise.
$L_{01}$ , $L_{10}$ , $L_{50}$ , $L_{90}$	The A-weighted noise levels that are exceeded 1%, 10%, 50%, and 90% of the time during the measurement period.
Equivalent Noise Level, $L_{eq}$	The average A-weighted noise level during the measurement period.
Community Noise Equivalent Level, CNEL	The average A-weighted noise level during a 24-hour day, obtained after addition of 5 decibels in the evening from 7:00 pm to 10:00 pm and after addition of 10 decibels to sound levels measured in the night between 10:00 pm and 7:00 am.
Day/Night Noise Level, $L_{dn}$	The average A-weighted noise level during a 24-hour day, obtained after addition of 10 decibels to levels measured in the night between 10:00 pm and 7:00 am.
$L_{max}$ , $L_{min}$	The maximum and minimum A-weighted noise level during the measurement period.
Ambient Noise Level	The composite of noise from all sources near and far. The normal or existing level of environmental noise at a given location.
Intrusive	That noise which intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of a sound depends upon its amplitude, duration, frequency, and time of occurrence and tonal or informational content as well as the prevailing ambient noise level.

## DEFINITIONS OF ACOUSTICAL TERMS

## TABLE E-1

At a Given Distance From Noise Source	A-Weighted Sound Level in Decibels	Noise Environments	Subjective Impression
	140		
Civil Defense Siren (100')	130		
Jet Takeoff (200')	120		Pain Threshold
	110	Rock Music Concert	
Diesel Pile Driver (100')	100		Very Loud
	90	Boiler Room Printing Press Plant	
Freight Cars (50')	80		
Pneumatic Drill (50')	70	In Kitchen With Garbage Disposal Running	Moderately Loud
Freeway (100')	60	Data Processing Center	
Vacuum Cleaner (10')	50	Department Store	
Light Traffic (100')	40	Private Business Office	Quiet
Large Transformer (200')	30	Quiet Bedroom	
	20	Recording Studio	
Soft Whisper (5')	10		Threshold of Hearing
	0		

## TYPICAL SOUND LEVELS MEASURED IN THE ENVIRONMENT AND INDUSTRY

**TABLE E-2**

*ILLINGWORTH & RODKIN, INC./Acoustical Engineers*

The scientific instrument used to measure noise is the sound level meter. Sound level meters can accurately measure environmental noise levels to within about plus or minus 1 dBA. Various computer models are used to predict environmental noise levels from sources, such as roadways and airports. The accuracy of the predicted models depends upon the distance the receptor is from the noise source. Close to the noise source, the models are accurate to within about plus or minus 1 to 2 dBA.

Since the sensitivity to noise increases during the evening and at night -- because excessive noise interferes with the ability to sleep -- 24-hour descriptors have been developed that incorporate artificial noise penalties added to quiet-time noise events. The *Community Noise Equivalent Level*, *CNEL*, is a measure of the cumulative noise exposure in a community, with a 5 dB penalty added to evening (7:00 pm - 10:00 pm) and a 10 dB addition to nocturnal (10:00 pm - 7:00 am) noise levels. The *Day/Night Average Sound Level*,  $L_{dn}$ , is essentially the same as *CNEL*, with the exception that the evening time period is dropped and all occurrences during this three-hour period are grouped into the daytime period.

## **Effects of Noise**

### **Hearing Loss**

While physical damage to the ear from an intense noise impulse is rare, a degradation of auditory acuity can occur even within a community noise environment. Hearing loss occurs mainly due to chronic exposure to excessive noise, but may be due to a single event such as an explosion. Natural hearing loss associated with aging may also be accelerated from chronic exposure to loud noise.

The Occupational Safety and Health Administration (OSHA) has a noise exposure standard which is set at the noise threshold where hearing loss may occur from long-term exposures. The maximum allowable level is 90 dBA averaged over eight hours. If the noise is above 90 dBA, the allowable exposure time is correspondingly shorter.

### **Sleep and Speech Interference**

The thresholds for speech interference indoors are about 45 dBA if the noise is steady and above 55 dBA if the noise is fluctuating. Outdoors the thresholds are about 15 dBA higher. Steady noise of sufficient intensity (above 35 dBA) and fluctuating noise levels above about 45 dBA have been shown to affect sleep. Interior residential standards for multi-family dwellings



are set by the State of California at 45 dBA  $L_{dn}$ . Typically, the highest steady traffic noise level during the daytime is about equal to the  $L_{dn}$  and nighttime levels are 10 dBA lower. The standard is designed for sleep and speech protection and most jurisdictions apply the same criterion for all residential uses. Typical structural attenuation is 12-17 dBA with open windows. With closed windows in good condition, the noise attenuation factor is around 20 dBA for an older structure and 25 dBA for a newer dwelling. Sleep and speech interference is therefore possible when exterior noise levels are about 57-62 dBA  $L_{dn}$  with open windows and 65-70 dBA  $L_{dn}$  if the windows are closed. Levels of 55-60 dBA are common along collector streets and secondary arterials, while 65-70 dBA is a typical value for a primary/major arterial. Levels of 75-80 dBA are normal noise levels at the first row of development outside a freeway right-of-way. In order to achieve an acceptable interior noise environment, bedrooms facing secondary roadways need to be able to have their windows closed, those facing major roadways and freeways typically need special glass windows.

### **Annoyance**

Attitude surveys are used for measuring the annoyance felt in a community for noises intruding into homes or affecting outdoor activity areas. In these surveys, it was determined that the causes for annoyance include interference with speech, radio and television, house vibrations, and interference with sleep and rest. The  $L_{dn}$  as a measure of noise has been found to provide a valid correlation of noise level and the percentage of people annoyed. People have been asked to judge the annoyance caused by aircraft noise and ground transportation noise. There continues to be disagreement about the relative annoyance of these different sources. When measuring the percentage of the population highly annoyed, the threshold for ground vehicle noise is about 55 dBA  $L_{dn}$ . At an  $L_{dn}$  of about 60 dBA, approximately 2 percent of the population is highly annoyed. When the  $L_{dn}$  increases to 70 dBA, the percentage of the population highly annoyed increases to about 12 percent of the population. There is, therefore, an increase of about 1 percent per dBA between an  $L_{dn}$  of 60-70 dBA. Between an  $L_{dn}$  of 70-80 dBA, each decibel increase increases by about 2 percent the percentage of the population highly annoyed. People appear to respond more adversely to aircraft noise. When the  $L_{dn}$  is 60 dBA, approximately 10 percent of the population is believed to be highly annoyed. Each decibel increase to 70 dBA adds about 2 percentage points to the number of people highly annoyed. Above 70 dBA, each decibel increase results in about a 3 percent increase in the percentage of the population highly annoyed.





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**Appendix I**  
**AIR QUALITY METHODOLOGY AND ASSUMPTIONS**

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## Appendix I

### AIR QUALITY METHODOLOGY AND ASSUMPTIONS

■ ■ ■

#### 1. CALINE-4 Modeling

The CALINE-4 model is a fourth-generation line source air quality model that is based on the Gaussian diffusion equation and employs a mixing zone concept to characterize pollutant dispersion over the roadway.<sup>1</sup> Given source strength, meteorology, site geometry and site characteristics, the model predicts pollutant concentrations for receptors located within 150 meters of the roadway. The CALINE-4 model allows roadways to be broken into multiple links that can vary in traffic volume, emission rates, height, width, etc.

The intersection mode of the model was employed, which distributes emissions along each leg of the intersection for free-flow traffic, idling traffic and accelerating and decelerating traffic. The intersection model extended 500 meters in all directions. Receptors (locations where the model calculates concentrations) were located at a distance of 20 feet from the roadway edge for all four corners of the intersection and at locations 50 feet in either direction, for a total of 12 receptors. Figure 1 is a schematic diagram showing the location of receptors.

The worst case mode of the CALINE-4 model was employed. In this mode, the wind direction is varied to determine which wind direction results in the highest concentration for each receptor. Emission factors were derived from the California Air Resources Board EMFAC-7F model. Adjustments were made for vehicle mix and hot start/cold start/hot stabilized percentages appropriate to each roadway. Temperature was assumed to be 40 degrees Fahrenheit (F).

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<sup>1</sup> California Department of Transportation, *CALINE-4- A Dispersion Model for Predicting Air Pollutant Concentrations Near Roadways*, Report No. FHWA/CA/TL-84-15, 1984.



The computation of carbon monoxide levels assumed the following worst-case meteorological conditions:

Windspeed: 1 mile per second (mps)  
Stability: F Category  
Mixing Height: 1,000 meters  
Surface Roughness: 100 cm  
Standard Deviation of Wind Direction: 10 degrees

The CALINE-4 model calculates the local contribution of nearby roads to the total concentration. The other contribution is the background level attributed to more distant traffic. The assumed 1-hour background levels were 5.0 PPM in 1998 and 3.5 PPM in 2010. The assumed 8-hour background levels were 3.5 PPM in 1997 and 2.3 PPM in 2010. These background concentrations were developed using carbon monoxide background levels and correction factors for future years recommended by the BAAQMD.<sup>2</sup> To generate estimates of 8-hour concentrations from the 1-hour CALINE results, a persistence factor of 0.70 was employed.

## 2. URBEMIS-7G

Estimates of regional emissions generated by project traffic were made using a program called URBEMIS-7G.<sup>3</sup> URBEMIS-7G is a program which estimate the emissions that result from various land use development projects. Land use projects can include residential uses such as single-family dwelling units, apartments and condominiums, and nonresidential uses such as shopping centers, office buildings, and industrial parks. URBEMIS-7G contains default values for much of the information needed to calculate emissions. However, project-specific, user-supplied information can also be used when it is available.

Inputs to the URBEMIS-7G program include trip generation rates, vehicle mix, average trip length by trip type and average speed. Trip generation rates for project land uses and land uses removed by the project were provided by the project transportation consultant. Average trip lengths for the Bay Area were used. Average speed for all types of trips was assumed to be 30 MPH.

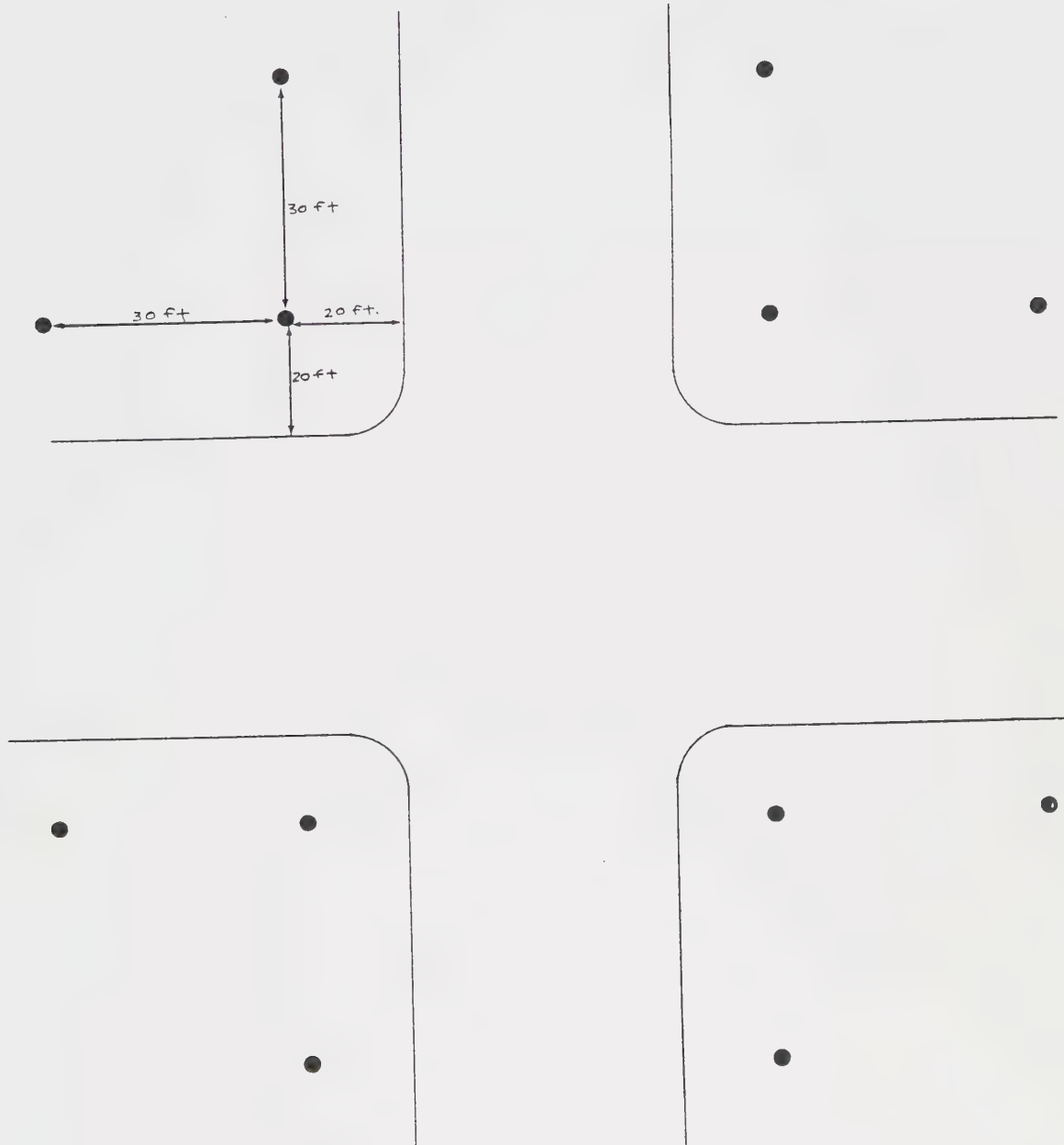
The URBEMIS-7G runs assumed summertime conditions with an ambient temperature of 75 degrees Fahrenheit. The URBEMIS-7G model calculates PM<sub>10</sub> emissions from both exhaust and road dust.

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<sup>2</sup> Bay Area Air Quality Management District, *BAAQMD CEQA Guidelines*, 1996.

<sup>3</sup> San Joaquin Valley Unified Air Pollution Control District, *URBEMIS-7G User's Guide*, May 1998.

Figure 1: Location of CALINE-4 Receptors





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**Appendix J**  
**SHUTT MOEN AIRPORT ISSUES ANALYSIS**

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# Stanly Ranch Environmental Impact Report

## Aviation Compatibility Analysis

January 1998

A Discussion Paper  
Prepared for  
Brady ■ LSA

by  
Shutt Moen Associates

### INTRODUCTION

Shutt Moen Associates was retained by Brady ■ LSA to provide insight into several airport land use compatibility issues that could potentially affect the proposed Stanly Ranch development. Our general task is to evaluate the comments and recommendations presented by Mr. Carl Kangas in his letter to the Napa County Airport Land Use Commission (dated August 12, 1997). Mr. Kangas is a member of the Commission and a commercial pilot. For ease of review, our evaluation follows the format of Mr. Kangas' letter. Key text is quoted in *italics* followed by our analysis.

### ITEM #1: NOISE LEVEL CONTOURS

**Kangas:** *Figure 5C, page 5-8 [of the Napa County Airport Land Use Compatibility Plan] does not show noise levels under the traffic pattern.* The text goes on to state that both personal experience and published single-event noise levels for the Bonanza A-36 and C-90 support this conclusion.

**Analysis:** As is noted on Figure 5C (Figure 1 in this report), the noise contours depicted are measured in CNEL. CNEL is a cumulative noise metric. The flyover noise levels quoted by Mr. Kangas are single-event measures. It is important to understand the differences between cumulative and single-event noise metrics.

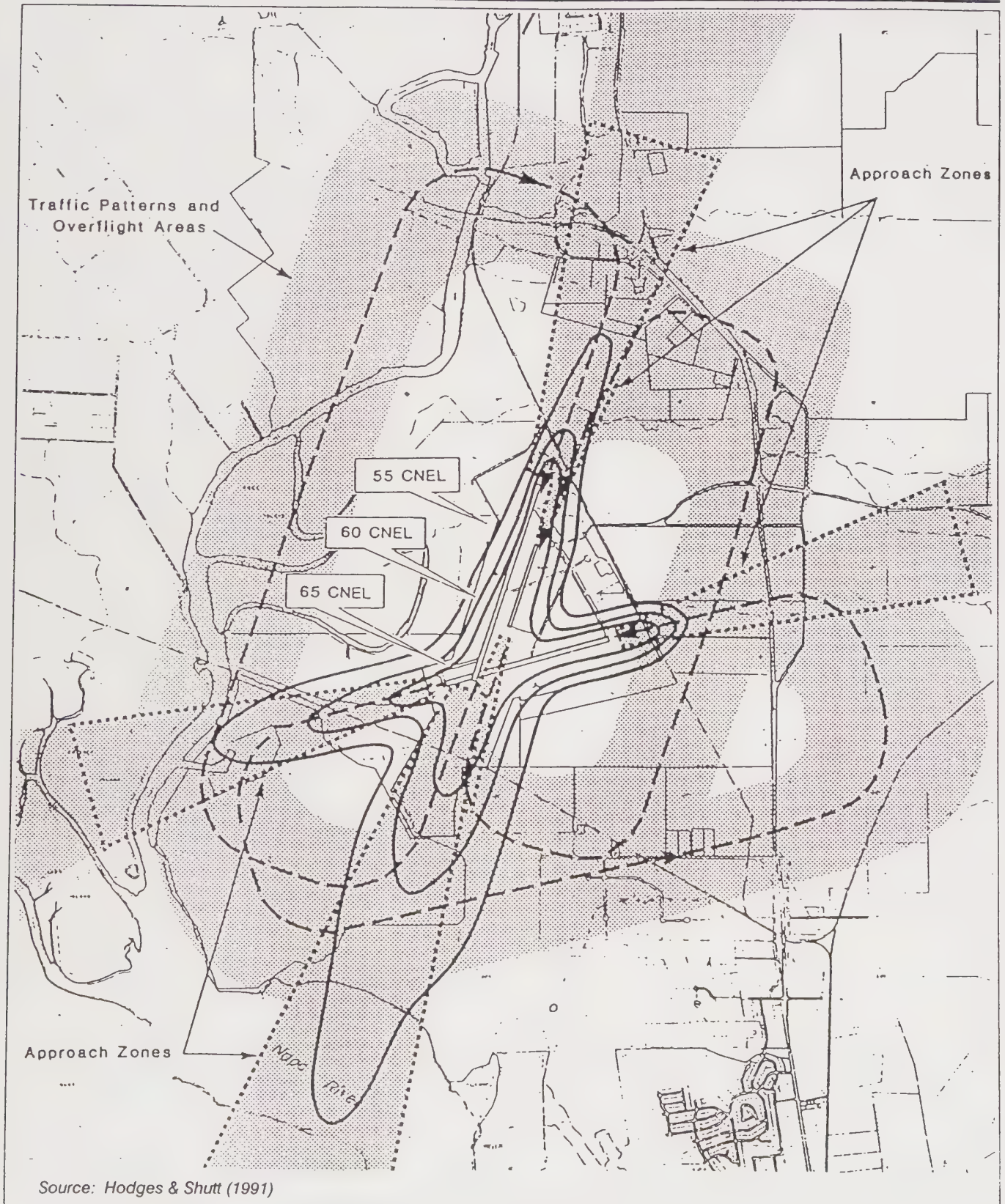


Figure 1

## Airport Impact Areas

Napa County Airport



- Cumulative Noise Metrics

As was noted in the *Compatibility Plan* (page 2-1):

“Airport noise is particularly difficult to measure because of the widely varying characteristics of the individual sounds and the intermittent nature of their occurrence. In an attempt to provide an appropriate measure of airport noise impacts, various composite noise level descriptors have been devised. The [noise] descriptor used in California to measure cumulative noise impact is the Community Noise Equivalent Level (CNEL). CNEL values are calculated using a complex set of equations based upon several factors:

- ▶ The single-event noise exposure levels for each type of aircraft
- ▶ The volume of activity and mode of operation by aircraft type
- ▶ Runway utilization and flight patterns
- ▶ The time of day when the operations occur”

While flyover noise levels are one component of CNEL contours, there is no direct correlation between an individual noise event and the CNEL contour for an airport.

In Figure 1, it can be seen that the noise contours for the airport do not encompass the project site. Therefore, from an ALUC policy perspective, noise is not a significant concern.

- Single-Event Noise Metrics

Included in Mr. Kangas’ letter were excerpts from the pilot operating manuals for the Bonanza A-36 and C-90. The copied material indicates that the aircraft will produce 74.3 dBA and 76.7 dBA, respectively, at ground level during an overflight. These numbers represent the peak noise exposure that would be experienced under standard conditions. This peak noise level is a type of single-event noise measure typically referred to as  $L_{max}$ . One can gain some insight into the intrusiveness of the single-event noise levels produced by the Bonanza A-36 and C-90 by comparing them to common sources of noise:

- ▶ Normal speech at 3 feet      65 dB
- ▶ Power mower at 100 feet      70 dB
- ▶ Garbage disposal at 3 feet      80 dB
- ▶ Diesel truck at 50 feet      85 dB

Although, there is general agreement within the aviation industry on thresholds of significance for CNEL, there are no accepted standards for single-event noise thresholds. The report issued by the Federal Interagency Committee on Noise concluded that while single-event noise measures can be good at predicting short-term response, they are not good at predicting long-term annoyance. Because there is no accepted threshold for single-event sound levels associated with aircraft operations, noise compatibility must be evaluated based upon the cumulative noise measure: CNEL.



## ITEM #2: COMPATIBILITY ZONES

**Kangas:** *There are two Zone D areas that are encroached on in part by Zone Es, specifically the areas south of Green Island Road to the south of the airport, and an area northwest of the airport, west of the Napa River. Both of these E zones are overflowed... I see no valid reason for the incursion of those E zones into the traffic patterns, which should all be D zones. For safety reasons, the entire traffic pattern should be a Zone D.*

**Analysis:** Until the preparation of the Caltrans *Airport Land Use Planning Handbook* in 1993, it was widely assumed that the accident potential under the traffic pattern was substantial, although probably lower than in the approaches to runways. Data developed by the U.C. Berkeley Institute for Transportation Studies for the *Handbook* refuted that long-held assumption. The Institute for Transportation Studies collected accident location data from National Transportation Safety Board files and correlated the location with the associated runway. Data was collected on some 400 accidents near airports throughout the United States. As can be seen in Figures 2 and 3, there are very few accidents lateral to the runway. Many of those that are lateral to the runway would have remained on-airport.

The Caltrans *Airport Land Use Planning Handbook* (in Chapter 9) discusses the relationship between accident potential and land uses characteristics. Six safety zones are delineated and acceptable forms of development are identified for each zone. The zones range from the Runway Protection Zone, the most restrictive, to the Traffic Pattern Zone, the least restrictive. The *Handbook* notes on page 9-23 that within the Traffic Pattern Zone "... the potential for aircraft accidents is relatively low and the need for land use restrictions is thus minimal." Therefore, it is concluded that safety to those on the ground would not be a significant concern.

In the preceding paragraphs it has been concluded that neither aircraft noise or safety were significant concerns for the proposed Stanly Ranch project. However, the potential exists for annoyance associated with overflights. The *Handbook* notes on page 3-8 that:

Experience at many airports has shown that noise-related impacts do not stop at the boundary of the outermost mapped CNEL or DNL contour. Many people are sensitive to the frequent presence of aircraft overhead even at noise levels lower than typically measured by cumulative noise level contours. A fear factor also contributes to this sensitivity.

Concern for the impacts of overflights shaped development of compatibility policies by the Napa County Airport Land Use Commission. On page 5-9, the *Airport Land Use Compatibility Plan* identified the Stanly Ranch area as "an area of concern with respect to future land use compatibility". In 1991, when the *Compatibility Plan* was adopted, the Stanly Ranch parcel was designated as a Special Study Area and zoned for Planned Development. Two specific compatibility measures were recommended:

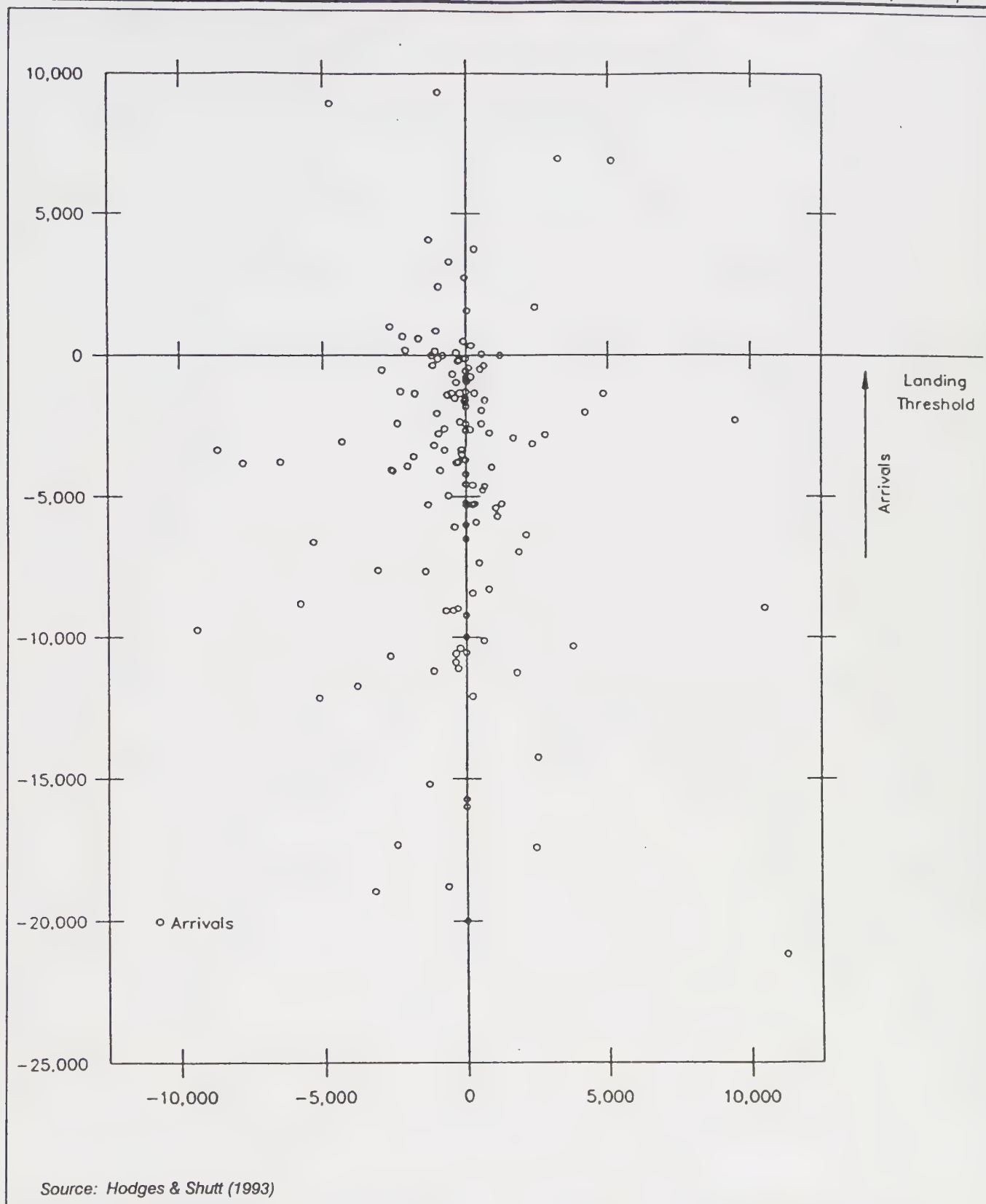


Figure 2

## Arrival Accident Location Pattern Napa County Airport

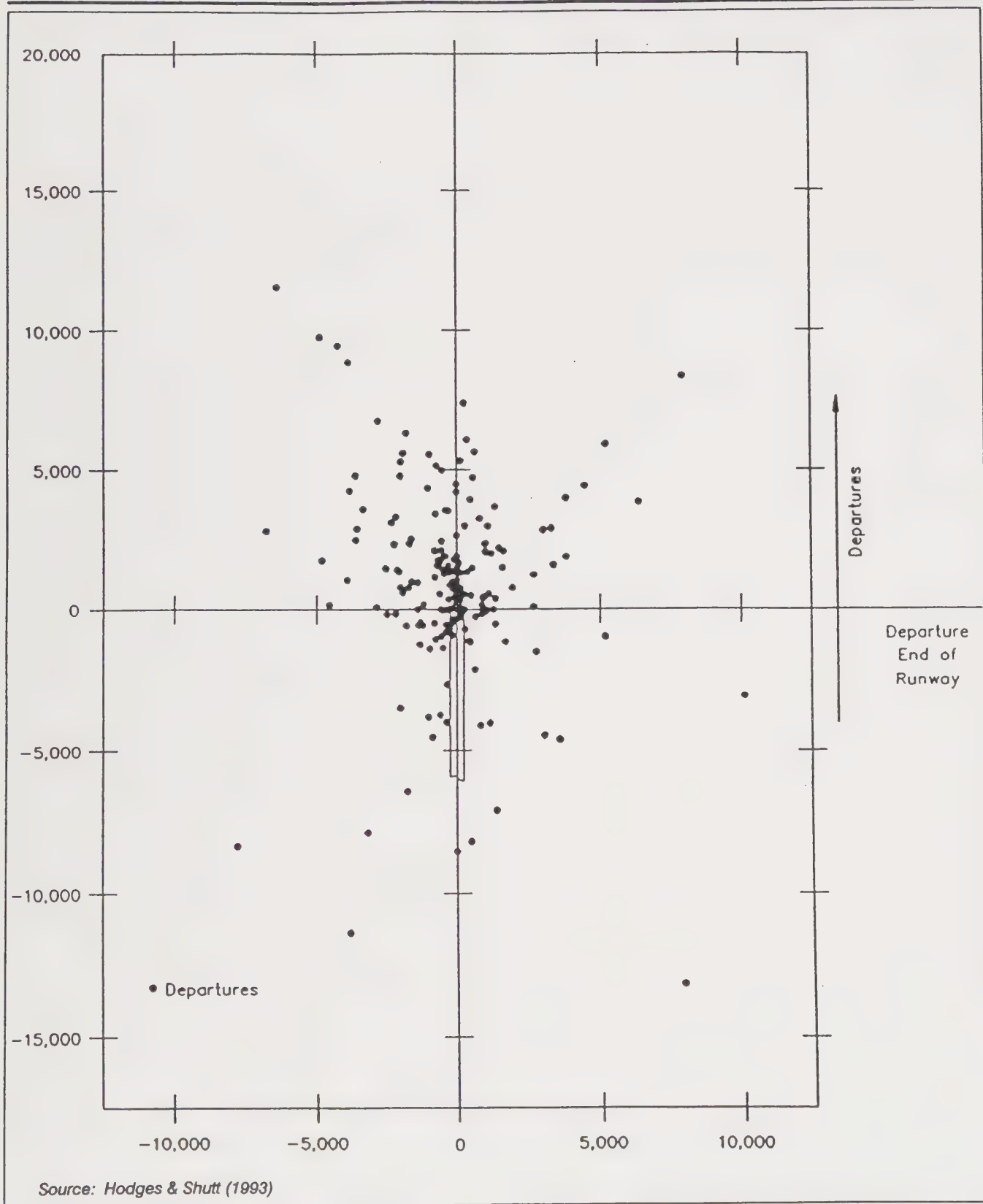


Figure 3

## Departure Accident Location Napa County Airport

1. Residential development should be limited to areas outside of the traffic pattern. In this area the floodplain of the Napa River encompasses the Airport's traffic pattern area (designated as Zone D in this Plan).
2. Buyer notification should be required (i.e., dedication of overflight easements).

The *Compatibility Plan* then goes on to recommend that specific development plans for the Stanly Ranch "be referred to the Airport Land Use Commission for a consistency determination".

When it was adopted by the Airport Land Use Commission in 1991, the intent was to permit development on the Stanly Ranch site, but use site design and overflight easements to obtain an acceptable level of compatibility. This is consistent with the compatibility objective for overflight impacts described in the *Handbook* on page 3-8:

... to help people with above-average sensitivity to aircraft overflights — people who are highly annoyed by overflights — to avoid living in locations where frequent overflights occur.

**Kangas:** *Allowing residential building in a traffic zone is not consistent with the Airport Land Use Compatibility Plan. See page 3-12, paragraph 3.4.2.*

**Analysis:** Not all areas that are commonly overflown are considered part of the "traffic pattern." The *Airport Land Use Compatibility Plan* defines the Traffic Pattern Area (Zone D) as those areas where aircraft on the common flight paths are between 300 and 1,000 feet above the ground. The Common Flight Paths (Zone E) are those areas where aircraft are generally 1,000 feet above the ground. Policy 3.4.2 addresses Zones A through D. Within Zones A through D, residential uses are restricted. Zone E is addressed in Policy 3.4.3. Residential uses within Zone E are not directly restricted.

The *Compatibility Plan* contained a graphic that presented the traffic patterns and overflight areas for the Napa County Airport (Figure 1). The center of the west side traffic pattern for Runway 18R-36L is depicted as 6,000 feet west of the runway. An overflight area is defined that is 4,000 feet wide, 2,500 feet west of the center of the traffic pattern and 1,500 east.

To assess the current validity of this traffic pattern delineation, telephone interviews were conducted with air traffic controllers in the Napa Tower on December 2, 1997. Discussions were also held with staff from Japan Airlines' (JAL) training program at Napa County Airport. Neither the controllers nor JAL staff believe that the traffic pattern has changed since the *Compatibility Plan* was prepared. However, based upon these interviews, the traffic patterns can be more precisely defined:

- |  |                                   |
|--|-----------------------------------|
| ▶ Single-engine aircraft, other than JAL   | 4,000 - 5,000 feet west of runway |
| ▶ JAL single-engine aircraft (A-36)        | 6,700 feet west of runway         |
| ▶ Twin-engine aircraft, including JAL C-90 | 7,300 feet west of runway         |
| ▶ Jet aircraft                             | 7,000+ feet west of runway        |



### ITEM #3: NOISE

**Kangas:** *As stated in Item #1, actual noise values of aircraft using the Napa County Airport exceed the recommended guidelines for residential land use ...*

**Analysis:** As was noted earlier, this conclusion is a result of not realizing that CNEL is a cumulative noise metric having no direct relationship to individual noise events.

**Kangas:** *... the frequency of overflights can be as often as one per minute during peak traffic periods which are from as early as 7:00 a.m. to as late as 10:00 p.m.*

**Analysis:** Although no formal documentation exists, an overflight frequency of one per minute during busy periods is very plausible. However, both air traffic control and JAL staff indicate that it is rare for there to be multiple aircraft in the pattern before 8:30 a.m. Multiple aircraft training operations at night are also uncommon.

**Kangas:** *Residents along Milton Road have made numerous noise complaints in the past. To allow more residential building in the same traffic pattern would not be wise land use and could only invite more noise complaints, despite aviation easements and disclosures.*

**Analysis:** Noise complaints have come in the past from the Milton Road area. The number of noise complaints is small enough and infrequent enough that the County has never developed a formal system for responding to noise complaints. As an organized record (i.e., database) does not exist, it is not possible to analyze the pattern of complaints. Anecdotal information suggests that noise complaints are most commonly associated with unusual events, such as an unusually loud jet.

While the use of easements and disclosure statements *reduces* the probability of noise complaints of future property owners, these measures are unlikely to *prevent* all noise complaints. These measures reduce the likelihood that individuals highly sensitive to aircraft noise will acquire a residence near an airport. However, aircraft noise that did not seem intrusive when a house was acquired, can become a significant source of annoyance over time. If aircraft operations increase or there is an increase in the number of louder aircraft, residents may complain even if they were told at the time of purchase that this was anticipated to occur. It is unfortunate, but true, that many people are poor predictors of their sensitivity to aircraft noise.

While the principal purpose of aviation easements is to alert potential purchasers that a property is likely to be exposed to aircraft overflights, easements also confer certain rights to the airport. The various enumerated rights (e.g., right of overflight) enable normal aircraft operations to occur in the vicinity of the airport. The use of easements reduces the liability, if any, that may result from aircraft operations.

## ITEM #4: OPEN SPACE

**Kangas:** *There are several references to the need for open space for emergency landing in the ALUCP. Page 2-6 states that an area as small as 75 feet by 300 feet can be adequate for a survivable emergency landing. This may have been true at one time for much lighter and slower aircraft than we now operate. This size is nowhere near adequate for the higher performance single-engine airplanes operating at the Napa County Airport today.*

**Analysis:** There has actually been very little change in the types of light aircraft using Napa County Airport in several decades. With the exception of a small number of turboprop models, the high-performance, single-engine aircraft using the airport are virtually identical with the types of aircraft that have been using the field for three decades. The Bonanza A-36 is typical of this class of aircraft. This model aircraft was first sold in 1968. Although there have been modifications to the aircraft over the years, its basic performance characteristics have not changed significantly.

The dimensions for emergency landing sites quoted from the *Compatibility Plan* (75 feet by 300 feet), are based upon reviews of National Transportation Safety Board accident briefs. Records of actual accidents have shown that a football-field sized open area is enough:

- ▶ To be quickly recognized as a potential landing site by a panicky pilot
- ▶ To get a plane down and slowed before impacting an object on the ground
- ▶ To permit the occupants to survive, possibly with injuries, even if the aircraft is demolished

Larger emergency landing sites are better, of course. However, the concept behind football-field-sized sites is to increase the chances that the aircraft occupants can survive a forced landing. Damage to the aircraft is not a consideration. Moreover, larger sites *with the necessary characteristics* are usually difficult to site in an urbanized area. To be well suited as an emergency landing site, an open area must be relatively flat and free from large objects (e.g., trees and buildings). Golf courses and parks are common examples of sites that can have usable open space. However, it is important to realize that open space for emergency landing sites do not need to look like a runway to be usable. For example, parking lots — even when full of cars — have been successfully used many times. Anecdotal information suggests that this is because cars can function as arresting barriers by crumpling under the impact of a light aircraft.

## CHANGES IN PATTERNS OF AIRPORT USE

Shutt Moen Associates was also charged with documenting changes in the patterns of aircraft use at the Napa County Airport since the *Airport Land Use Compatibility Plan* was adopted in 1991. Changes relevant to this analysis are:

- ▶ Number of aircraft operations
- ▶ Fleet mix
- ▶ Traffic pattern

Activity at an airfield is typically measured in terms of the number of annual aircraft operations. An operation is either a landing or a takeoff. The training maneuver known as a “touch-and-go” entails a landing where the plane does not come to a complete stop before power is applied and the aircraft takes off. This counts as two operations. In Table 1 it can be seen that the current number of operations is substantially the same as in 1991. However, from 1991 to 1994 the number of operations grew significantly. This trend was reversed after 1994 and the number of operations declined 35%. This reduction in use is largely attributable to reductions in the number of JAL student pilots based at Napa County Airport. The reduction in activity is parallel to the number of aircraft based at the airport.

Fleet mix is the mixture of aircraft types using an airport. A change in fleet mix could affect noise levels associated with a particular airport. Except for JAL’s training operation, no documentation exists on the fleet mix at Napa County Airport. Anecdotal information suggests that there has been an increase in transient jet operations since 1991, although the total number remains small. In contrast, the changes to the training aircraft used by JAL is well documented. Piper Arrows and Aztecs were being used for training when the *Compatibility Plan* was developed. Since that time, JAL has switched to Beech A-36s and C-90s. Because of its turboprop engines and higher pattern altitude, the C-90 may have been perceived as quieter than the Aztec that it replaced. However, the A-36 is significantly louder than the Arrow. Staff with JAL has indicated that they received numerous complaints when the A-36 was introduced.

JAL has not changed its traffic patterns since 1991. As was noted earlier in the text, the training program calls for the A-36 to be flown 1.1 nautical miles (6,700 feet) west of Runway 18R-36L. The C-90 is flown 1.2 nautical miles (7,300 feet) west of the runway. Turns toward Runway 18R are not made until aircraft pass north of Highway 29. This places JAL training aircraft over the eastern portion of the Stanly Ranch. JAL staff indicated that they believe that their aircraft stay within one-tenth of a nautical mile of their intended flight path. That is, A-36s will fly no farther than 1.2 nautical miles west of the runway, and C-90s no farther than 1.3 nautical miles (7,900 feet) west of the runway. Even with this variation, the JAL aircraft remain within the overflight area presented earlier (Figure 1).

Over the period since 1991, the hours in which JAL conducts its training operations has varied. Most operations are conducted between 8:30 a.m. and 5:00 p.m. However, when JAL had its peak number of students in 1993 and 1994 (200 students), the daylight hours during summer evenings were also used. Since JAL’s current number of students is just over 100, there has not been a need to use summer evenings. Limited amounts of night training also occurs. In prior years, much of the night training occurred at Napa County Airport. Due to changes in training requirements, night training operations now occur at both Napa County Airport and other airports. Napa County Airport is used whenever weather (especially fog) might make it difficult for aircraft to return from another airport.



	1991	1992	1993	1994	1995	1996	1997
<b>Operations</b>							
Itinerant	69,599	75,904	79,758	110,118	87,955	75,762	67,500*
Local	109,941	130,851	123,972	130,804	100,906	85,288	80,750*
<i>Total</i>	<i>179,540</i>	<i>206,755</i>	<i>203,730</i>	<i>230,922</i>	<i>188,861</i>	<i>161,050</i>	<i>148,250*</i>
<b>Based Aircraft</b>	243	236	254	253	243	245	223

\*Estimated based on first 10 months' data.

Source: Napa County Airport (1997)

Table 1

**Annual Activity**  
Napa County Airport



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## Appendix A

### References

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Grahm, Devin, Air Traffic Control Manager. December 2, 1997. Federal Aviation Administration, Napa Airport Air Traffic Control Tower. Telephone interview.

Hill, Ed, Chief Instructor for JAL. December 3, 1997. Telephone interview.

Hodges & Shutt. April 22, 1991. *Airport Land Use Compatibility Plan* prepared for Napa County Airport Land Use Commission.

\_\_\_\_\_. December 1993. *Airport Land Use Planning Handbook* prepared for Caltrans Division of Aeronautics.

Kangas, Carl. August 12, 1997. Letter to Napa County Airport Land Use Commission.

Watson, David, Air Traffic Control Specialist. December 2, 1997. Federal Aviation Administration, Napa Airport Air Traffic Control Tower. Telephone interview.

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**Appendix K**  
**NAGAOKA AGRICULTURAL STUDY**

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## **Stanley Ranch Agricultural Site Evaluation**

### **Introduction**

An agricultural evaluation of the Stanley Ranch, west of the Napa River and east of Stanley Lane, in Southern Napa County, California, was implemented at the request of the City of Napa Planning Department as part of an Environmental Impact Report. The agricultural investigation to estimate acreage for vineyards and various salt tolerant crops was prepared based on the soil characteristics, slope, chemical analysis of soil and water, and is reported herein.

### **Summary**

1. Twenty-nine soil backhoe and soil auger reconnaissance sites disclosed acceptable soil depth and texture for vineyard development at most sites. Measurement of the surface area of an aerial photo resulted in an estimated of about acres having more than sufficient soils with acceptable depth and texture for wine grapes, and slopes of less than thirty percent (30%).
2. An analysis of the soil chemistry disclosed soils with low salts suitable for wine grapes at upland elevations above the 7 foot elevation above sea level. The areas described as lowlands disclosed moderate (2.9 - 13.0 Ec) salt levels in the north and very (10 - 23 Ec) salt tolerant crops in the south wetlands.
3. Measurement of the upland soils totaled 398.2 acres, the north and the south lowlands 524.1 acres. For a grand total of 922.3 ac.
4. The upland soils were found to be Haire loam soils similar to nearby vineyards in the Los Carneros viticultural region
5. The north wetlands are apparently Diablo clay, Clear Lake clay and Reyes silty clay loam, appropriate moderately salt tolerant crops include barley, cotton, sugar beets, wheat, safflower, soy beans, sorgumand rice in portions less than 3.0 EC
6. The south wetlands are almost entirely Reyes silty clay loam, appropriate for very salt tolerant crops such as bermudagrass, wheat grass, tall fescuee and sudan grass but only at reduced levels.

### **Methods, Backhoe Soil Survey**



A tractor-mounted backhoe was employed to inspect the soil depth, texture and profile at twenty-five sites. Sites were selected as representative of an area topography or formation. Sites were inspected between September 18 and

September 19, 1997. Subsequently three additional sites were sampled by auger borings on October 3, 1997, to clarify the soil chemistry at several sites between 5-10' elevation suggested by the first survey. The location of sites is illustrated and numbered on the yellow spots on the transparency, overlaying the infra red aerial photo, Exhibit 1.

The observations of all twenty-eight sites are summarized and tabulated in Appendix 1 and referenced to sites shown on transparency, Exhibit 1.

### **Soil Physical Observations**

Most upland sites above the 7' elevation appear to be Haire loam deposited by alleuvial action from the surrounding hillsides. The surface is characterized by the established vineyards, pastures and eucalyptus hedges along Stanley Lane. The soils were characterized by sandy loam or loam to a depth of 16" to 58" overlying compacted, dense clay or clay loam subsoils that were apparently impenetrable to tree, grass root exploration and water penetration, the soil profile below the clays were dry. In the case of a hillside ridge at sites 5, 18 and 19, the loam topsoils ranging from 9-18 " are underlaid by sedimentary shale and sandstone parent materials.

The lowlands particularly the southern portion downstream of the levee, near the southern crossing bridge, between the 7' and -2.0 elevation contour. The surface is characterized by aquatic, marsh weeds. The surface soil was observed to be higher in organic matter similar to peat; the subsurface were blue to black plastic clays apparently inhospitable to air and root activity yet not anerobic nor sour. The soils above the clays were relatively shallow implying the suitability of shallow rooted, salt tolerant forage.

The northern lowlands located upstream from the levee under the southern crossing bridge and west of Horseshoe Bend are characterized by native and forage grasses. The soils were mostly composed of deep loam profiles with gravelly stratas; at lower elevations the loams overlay blue-black clays described earlier.

### **Soil Chemistry**

The 1984 Nagaoka Stanley Study, Exhibit 2, established that the low lying areas were associated with stunted and dying grape vines. Soil analysis performed on samples selected within the vineyard from soil near healthy, sick, and absent Pinot Noir vines, concluded that soils above the 10 feet elevation were associated with healthy vines; soils about six feet in elevation were associated with stunted vines; soils less than the 4.39 foot elevation were associated with dead vines.

Clearly the values and vine descriptions for ECe correlated with the University of California guidelines for Interpreting of Laboratory Data on Soil Suitability for Grapes as summarized below:

<u>ECe</u>	<u>Description</u>
1.5 to 2.5	No problems.
2.5 to 4.0	Increasing problems, 10 to 25% yield loss expected.
4.0 to 7.0	Severe problems, 25 to 50% yield loss expected.

The present study incorporates a 1996 infrared aerial photo, exhibit 1 not available in 1984 overlayed with a topographical map described as select site constraints provided by Tom Kanbe. By comparing the soil chemistry with the elevation line, it appears that acceptable soil chemistry can be found above the seven foot above sea level elevation.

The soil chemistry analysis for total salts (EC) between sites lower than seven foot elevation: for example, sites 7 and 23 were found to have excessive salts for vineyard according to the University of California guidelines.

In addition two ridges were found extending off the upland and existing vineyard areas at or above 7' elevation near sites 9 and 26. Backhoe and hand auger soil testing disclosed that these two peninsulas had acceptable EC for vineyards.

By applying the above ECe groupings against the levels observed in the field soil analysis, a classification system for the Stanley Ranch soils was developed based on the elevation which was supported by a correlation of laboratory data to apparent vine performance in the established vineyard. Clearly the chemical classification agrees with the physical classification described earlier and can be used as a model to impose upon the Ranch.

The Dellavalle reports of Soil Analysis No. 25011 to 25369, is given in Exhibit 3.

All upland sample sites except for low areas noted above disclosed acceptable soil chemical analysis for vineyards as defined above.

The north and south lowland sites were characterized by adverse salt levels for grapes. The ECe values for all A horizon sites in the north lowlands averaged 6.98 with a range of 4.5 to 13.0. In the 1984 study, vine growth was badly depressed at 3.9 and no vines were living at 5.1 ECe. Clearly, these salt levels can be prohibitive to grape vines survival and are not recommended for vineyards at this time. Alternate salt tolerant crops can be considered.

The southern lowland sites disclosed ECe's of between 10 and 23 in the 1997 study. Few commercial crops can tolerate salts at these levels.



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The survey is by best efforts and attempts to be thorough yet, by no means can it be exhaustive, given the scope and limitation of the project.

### **Acreage Calculation**

The area in square inches within the sub group lines was measured with a planimeter and factored by the scale of the aerial photo, 1"=800'. Several soil groupings were dictated by soil chemistry.

The first soil grouping is labeled as block A. The uplands including the existing vineyard and elevations above 7' feet above sea level where the soil depths averaged 27.7" inches and ranged from 16 inches to over 40" inches, and are shown by the fine black line highlighted in green. They include blocks that are identified as A1, A3 and total 398.2 acre; block A2 is included but is particularly appropriate for concentrated red wine styles such as Pinot Noir. Its sites averaged 14.3" inches in depth overlying cobble. They are appropriate for wine grape varieties.

The second grouping, labeled Block B, the northern lowlands below the 7' elevation, includes soils that were characterized by high salt levels expressed as EC between 4.7 and 23.0. They are highlighted in red and total 259.6 acres; they are suitable for forage crops such as barley, cotton, sugar beets, wheat, safflower, soy beans, sorghum and rice in areas with less than 3.0 EC.

The third grouping, labeled as Block C, the southern lowlands, includes soils that have very high salt levels, with EC between 10.0 to 23.0 and lay at elevations between 0 and -2.2 feet above sea level. They are highlighted in red and total 263.1 ac; they are suitable for a few agricultural crops, including bermuda grass, wheat grass, tall fescue and sudan grass but only at reduced levels. This area is probably best suited for wetlands.

## Conclusion, Acreage Classification

Based upon the classification of soils, a calculation was made on the Stanley Ranch aerial print surface map of area in inches and converted to acres. The calculation disclosed the following estimate of acreage:

<u>Block</u>	<u>Classificaiton</u>	<u>Description</u>	<u>Soil Sites</u>	<u>est. acres</u>	<u>total acres</u>
A1	Upland	Vineyard west of Stanley Lane	1,2,3,4,5,6, 17,20,21	348.2	
A2	Upland	Highland Ridge	5,6,18,19	42.6 (included above)	
A3	Upland North	between Stanley Ln and HWY 12 (47ac - 3.4ac salt areas)	22,24,25 23	43.6	
A4	Upland South	South of vineyard	9	2.2	
A5	Upland	South of vineyard	26	0.7	
A6	Upland	East of HWY 12	14	3.5	(A1,3-6) 398.2
B1	Northern Low-lands	Horse Shoe Bend	11,12,13	204.8	
B2		Between HWY 12 and Stanley Ln.	23	7.2	
B3	Northern Low-lands, south	South of bridge to levee	7,10	54.8	(B1,2) 266.8
C1	Southern Low-lands	excludes A4 (-2.2) and A5 (-.07)	8, 27	260.2 -2.2 -0.7	257.3
GRAND TOTAL					922.3

The study estimates that approximately 43.4% of the Stanley Ranch is suitable for vineyard development. The remainder can be viable for salt tolerant crops



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depending upon the crop characteristics and the reclamation practices implemented.

### Soil Classification

The 1978, Napa County Soil Survey , produced by the Soil Conservation Service, Exhibit , indicates the Stanley Ranch soil classification as follows:

<u>Location</u>	<u>Soil Classifications</u>
Upper lands	Haire Loam 146 Haire Clay 150 Diablo Clay 126
Northern lowlands	Clear Lake Clay 117 Diablo Clay 126 Reyes Silty Clay Loam 172
Southern lowlands	Reyes Silty Clay Loam 172

The backhoe investigation and physical analysis confirmed the occurrence of loams, clays, and clay loams in approximately the areas reported.

### Water Quality, Irrigation Requirement

Vineyards, although historically non irrigated, benefit greatly from irrigation particularly during the planting and development period. Mature vineyards in the Carneros area can be sustained by annual rainfall and as little as one third acre/feet/per year or about 100 gallons of water per vine per acre per year.

According to the Soil Survey, the Haire soils are estimated to retain about 3" to 6" inches of available soil moisture. Diablo is estimated to retain 6-10" inches. Authorities suggest about 9 to 14 inches of annual available water capacity (awc) are estimated for vineyards in the north coast. If the deficit of 4.5" (0.3ac.ft) to 6 (0.5ac.ft) inches must be supplied by irrigation, then between 120 and 200 acre feet of water for about 400 acres could be required. No estimate has been calculated at this time for possible frost protection water if needed nor for alternate crops.

The source of this amount of water is beyond the scope of this study, but should be addressed with the services of an agricultural engineer or water rights expert preparatory to the implementation of a developemnt plan. Surface runoff collection, wells could be possible sources. Generally, wells are not high capacity or of sufficient volume in the Carneros area. Collection of runoff of annual winter rainfall from the surrounding watershed would be expected to be a potential source

A review of the literature for crops that could tolerate higher salt (ECe) levels was consulted and summarized in appendix II. The table is arranged by crop groupings (forage, field and vegetable) and by the ECe at increasing levels and by the crop response from 0 to 50% crop reduction similar to the effects from salt concentration observed on the existing Stanley Ranch Vineyard at various elevations.

By comparing the ECe values disclosed for the soil groupings, the crops that could be acceptable were tabulated below. Only the ECe for 0% yield reduction is shown for uplands but yield reduction between 10 - 50% should be consulted for the northland and the lowlands.

### Likely Crops by ECe Levels

**ECe**  
< 2.0

Uplands

**ECe**

> 13.0

Lowlands (N&S)

Fruit/Nuts

All crops<sup>1</sup>

Vegetable

Field

All crops

Field

All crops

Barley @ 25% (EC13)  
Cotton @ 25% (EC13)  
Wheat @ 50% (EC13)  
Sugar Beets @ 50% (EC15)

Forrage

All crops

Tall Wheat grass @ 25%  
(EC 13.3)  
Bermuda grass @25%  
(EC14.7)  
Wheat grass @ 50%  
(EC15)  
Hardin grass @ 50%  
(EC13.3)  
Tall fescuee @ 50%  
(EC16.0)  
Susan grass @ 50%  
(EC14.4)

<sup>1</sup> see appendix II, 0% crop loss

Only a handful of crops could be grown on the lowland areas depending upon the salt level. By referring to the soil analysis, lowland soils ranged from 2.9 to 13.0 ECe: with 13.0 as the minimum ECe, the crops are only Date Palm, Barley, Cotton, Wheat grass and Bermudagrass and even so at 25 - 50% yield reduction. Oat hay and even alfalfa has been grown at higher elevations upstream at the former Stewart Dairy by apparently as a result of lower EC soil levels and irrigation with low salt water (sweet water) from the Napa River during low tide when brackish salt water from San Pablo Bay was out.

The acceptable crops are not known to be grown in Napa County and are probably not economically viable candidates.

It appears that as is presently planted, various forage grass including Harding grass, sudan, fescuees, are tolerant of the high EC levels and may be the highest agricultural crops possible. For lowland areas of even higher ECe such as the southern lowlands, perhaps only wetland usage may be viable.

## Appendix 2

### CROP RESPONSE TO VARIOUS ECe LEVELS

#### FRUIT AND NUT CROP REDUCITON IN YIELD

Crop	ECe	ECe	ECe	ECe	ECe
	(0%)	(10%)	(25%)	(50%)	(Maximum)
Date palms	4.0	6.8	10.9	17.9	32.0
Pomegranates	2.7	3.8	5.5	8.4	14.0
Grapefruit	1.8	2.4	3.4	4.9	8.0
Oranges	1.7	2.3	3.2	4.8	8.0
Lemons	1.7	2.3	3.3	4.8	8.0
Apples, Pears	1.7	2.3	3.3	4.8	8.0
Walnuts	1.7	2.3	3.3	4.8	8.0
Peaches	1.7	2.2	2.9	4.1	6.5
Apricots	1.6	2.0	2.6	3.7	6.0
Grapes	1.5	2.5	4.1	6.7	12.0
Almonds	1.5	2.0	2.8	4.1	7.0
Plums	1.5	2.1	2.9	4.3	7.0
Blackberries	1.5	2.0	2.6	3.8	6.0
Boysenberries	1.5	2.0	2.6	3.8	6.0
Avocados	1.3	1.8	2.5	3.7	6.0
Raspberries	1.0	1.4	2.1	3.2	5.5
Strawberries	1.0	1.3	1.8	2.5	4.0

#### VEGETABLE CROPS REDUCTION IN YIELD

Beets	4.0	5.1	6.8	9.6	15.0
Broccoli	2.8	3.9	5.5	8.2	13.5
Tomatoes	2.5	3.5	5.0	7.6	12.5
Cantaloupes	2.2	3.6	5.7	9.1	16.0
Cucumbers	2.5	3.3	4.4	6.3	10.0
Spinach	2.0	3.3	5.3	8.6	15.0
Cabbage	1.8	2.8	4.4	7.0	12.0
Potatoes	1.7	2.5	3.8	5.9	10.0
Sweet corn	1.7	2.5	3.8	5.9	10.0
Sweet Potatoes	1.5	2.4	3.8	6.0	10.5
Peppers	1.5	2.2	3.3	5.1	8.5
Lettuce	1.3	2.1	3.2	5.2	9.0



Radishes	1.2	2.0	3.1	5.0	9.0
Onions	1.2	1.8	2.8	4.3	7.5
Carrots	1.0	1.7	2.8	4.6	8.0
Beans	1.0	1.5	2.3	3.6	6.5
Celery	1.8				
Squash (scallop)	3.2				
Squash (zucchini)	4.7				
Turnip	0.9				

#### FIELD CROPS REDUCTION IN YIELD

Barley	8.0	10.0	13.0	18.0	28.0
Cotton	7.7	9.6	13.0	17.0	27.0
Sugar Beets	7.0	8.7	11.0	15.0	24.0
Wheat	6.0	7.4	9.5	13.0	20.0
Safflower	5.3	6.2	7.6	9.9	14.5
Soybeans	5.0	5.5	6.2	7.5	10.0
Sorghum	4.0	5.1	7.2	11.0	18.0
Rice (paddy)	3.0	3.8	5.1	7.2	11.5
Corn	1.7	2.5	3.8	5.9	10.0
Flax	1.7	2.5	3.8	5.9	10.0
Cowpeas	1.3	2.0	3.1	4.9	8.5
Beans (field)	1.0	1.5	2.3	3.6	6.5
Broadbean	1.6				
Peanut	3.2				
Sugarcane	1.7				

#### FORAGE CROPS REDUCTION IN YIELD

Tall wheat grass	7.5	9.9	13.3	19.4	31.5
Wheat grass (fairway)	7.5	9.0	11.0	15.0	22.0
Bermudagrass	6.9	8.5	10.8	14.7	22.5
Barley (hay)	6.0	7.4	9.5	13.0	20.0
Perennial ryegrass	5.6	6.9	8.9	12.2	19.0
Birdsfoot trefoil, narrow leaf	5.0	6.0	7.5	10.0	15.0
Harding grass	4.6	5.9	7.9	11.1	18.0
Tall fescue	3.9	5.8	8.6	13.3	23.0
Crested wheat grass	3.5	6.0	9.8	16.0	28.5
Vetch	3.0	3.9	5.3	7.6	12.0
Sudan grass	2.8	5.1	8.6	14.4	26.0
Big trefoil	2.3	2.8	3.6	4.9	7.5
Alfalfa	2.0	3.4	5.4	8.8	15.5
Clover, berseem	1.5	3.2	5.9	10.3	19.0
Orchardgrass	1.5	3.1	5.5	9.6	17.5
Meadow foxtail	1.5	2.5	4.1	6.7	12.0
Clover, alsike, ladino, red, strawberry	1.5	2.3	3.6	5.7	10.0
Lovegrass	2.0				

Wheatgrass	3.5	
Wildrye	2.7	13.0

## IMPACTS

The impact of establishing 398.2 acres of vineyards for wine grape production may impact various environmental conditions.

Since vineyards are generally irrigated with about 0.5 ac.ft. per acre in the Carneros area, irrigation source for about 200 ac.ft. can include direct ground water pumping, surface runoff collection or a combination of the two. As a rule of thumb direct pumping without storage would require about 10 gallons per minute (10 GPM) per acre or GPM, a highly unlikely production for any well in the Napa Valley but particularly in the Carneros area where water capacity is usually not high. Surface potential collection is a function of the replaced watershed area and the distribution of rainfall to cause runoff and thereby collection. An estimate of this potential has not been determined at this time and is recommended as part of an engineering hydrology study. The quality of the water for vineyards would require water chemistry almost free from boron and excess salt as defined by University of California guidelines. Evapotranspiration (evaporation and transpiration) losses from various irrigated crops can be estimated by various coefficients based on the class A pan readings. Vineyards are estimated to be about 40% of ET certainly less than forage crops. Since there is no off-site runoff from vineyards drip irrigated, there is not expected to be any impact on ground water or downstream runoff with the exception of annual winter storm rainwater. Pre-emergent residual herbicides are commonly applied to mature vineyards but if applied within label restrictions, no contamination of ground or runoff is expected.

Should frost protection measures be required for vineyards, mechanical wind machine frost protection and possibly orchard heaters may be required.

If tree clearing were to occur as would likely occur if vineyards were developed, then wind velocity downwind from the tree hedges would likely increase. Studies in the grape growing regions of the Salinas Valley, Monterey County, suggest that wind breaks decrease vine stress from winds to a distance of about one half the height of the wind break. In the case of the Stanley Ranch, the eucalyptus trees were depositing aromatic oils on the established Carneros Valley Investors (CVI) Pinot Noir vineyard and were found to be detectable and undesirable in the resultant wines. Several rows of vineyard (thirty) were removed. The removal would likely increase wind velocity and decrease shade and desposition of eucalyptus oils on downwind crops.

The impact of runoff from vineyards would not impact wetlands since vineyards are generally not cultivated during the winter months and native winter annuals or cultivated perennial or winter annual cover crops are encouraged.

Level deterioration are not likely to be impacted by vineyard crops as well.



# Appendix I

## Stanley Ranch Soil Sample Observation September 18, 1997

Site	Depth	Color	Text	Description
1A	0-6	camel tan	sandy loam	high plateau grassy area; near Beringer vineyard
1B	6-36		clay loam	fine eucalyptus tree root to 36";
1C	36-115		loam	compacted blocky, grass roots to 30" >36" less blocky, less moist, more friable
2A	0-20	camel tan	sandy loam	75% fine med oak roots, high plateau
2B	20-40	olive tan	clay loam	moist plastic blocky; >40" dry apparently the limit of rain penetration; 25% med roots to 40"
2C	40-92	tan brown	loam	dry, no roots; could benefit from mixing; friable
2D	92-110+		gravelly sand	70% gravel <2"
3A	0-24	graytnbrwn	clay loam	low area below shade barn; most fine grass root to 24"
3B	24-98+	charcoalbrwn	clay	plastic blocky probably diablo clay; few grass roots to 64+"
4A	0-28	camel brwn	clay loam	north of shade barn; plastic blocky, compacted: most grass roots to 28"
4B	28-120+	camel tan	fineloamsand	very friable; mix with 4A; few fine grass roots to 53"
5A	0-18	camel tan	sandy loam	eucalyptis patio grove; rockout crops
5B	18-50	rust grey	gravellyloam	60% gravel; weathered sandstone parent material
5C	50-54+	rust grey	cobbly loam	10% soil
6A	0-16	camel tan	sandy loam	east of eucalyptis hedge
6B	16-60	greytanrust	silt loam	weathered sedimentary sandstone; most eucalyptis roots to 40"
6C	60+	greytanrust	gravecobble	cemented bedrock
7A	0-28	dk chocolate	sandy loam	low area draining upper ground; compacted to 19"; below friable, moist
7B	28-103+	rustgreyolive	silty sand	friable, rust suggests prolonged subsurface water saturation; moist (ss 28-52") few

fine roots to 103"; blue flecks 90-103"

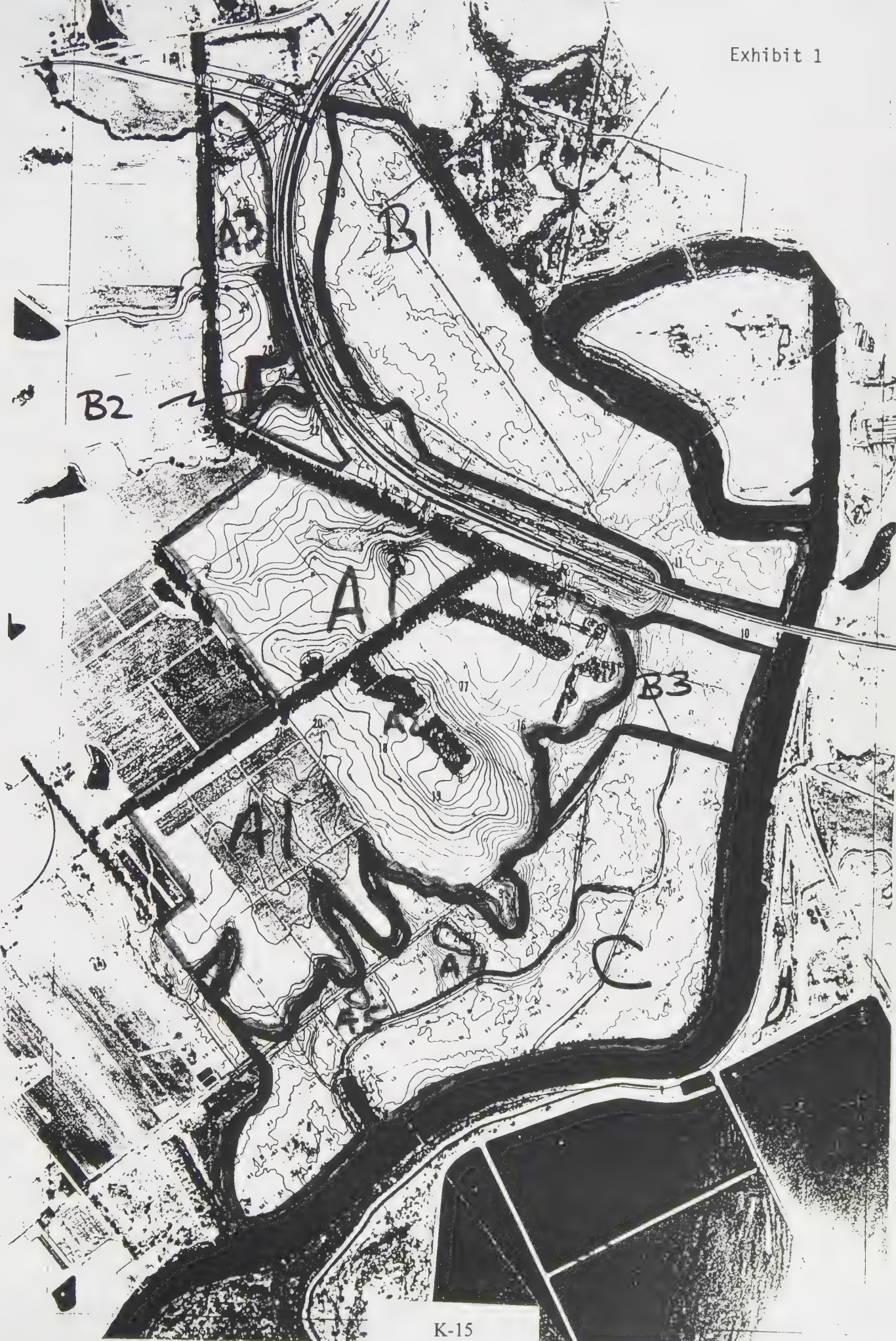
Site	Depth	Color	Text	Description
8A	0-24	tan brown	peat	lowland flood plain; west toe
8B	24-96+	blue-black	silt peat	(ss 8B = 24-48") sticky, plastic, mosit cake
9A	0-19	tan brown	loam	plateau south of 6
9B	19-56+	tan brown	clay	compacted, plastic, massive, stick, moist; (ss 9A = 19-36")
10A	0-16	rusttanbrwn	peat clay	under bridge; fractured blocky; high organic
10B	16-56+	rustbluecharcoal	silt clay	moist
11A	0-43	tan brown	clay	0-16 more organic; 16-28 dry, compacted;
11B	43-84+	cinntanbrwn	gravsilt sand	28-43 moist sticky plastic 30% gravel, moist
12A	0-40	rust grey	sandysiltloam	near levee;
12B	40-60+		silt clay	ribbons, silky
13A	0-42	rustgreytan	peat clay	northern low flood plain; 0-24 ashy gray, dry; 24-42
13B	42-51	olive brown	silt clay	charcoal tan, moist moist, ribbons, silky
14A	0-58+	camel tan	clay	high peninsula near H12; (ss14A = 0-36") blocky, primatic, massive; fine grass roots to 32"
15A	0-48	grey brown	clay	low ground near H12; grass, cockelbur roots thru 48"; flowing water at 52"
15B	48-52			moist, wet
16A	0-40	tan brown	loam	low area, compacted, dense
16B	40-93	tan brown	clay	slightly moist
17A	0-32	tan brown	loam	upper end of low area; compacted; most grass roots to 16"
17B	32-52	tan brown	clay loam	dense, compacted, mosit
17C	52-62	tan brown	silty sand	
17D	62-84		gravelly sand	few fine roots to 64"
17E	84-108		silty sand	
18A	0-9	tan brown	gravellyloam	upper plateau near eucalyptus; 20% fractured angular sandstone (FAS)
18B	9-48+		cobble	10% soil weathered sandstone; fine grass



roots to ; can be ripped

Site	Depth	Color	Text	Description
19A	0-16	tan brown	cobblyloam	high knoll or plateau; 30% angular cobble FAS
19B	16-56+	camel tan	cobble	80% FAS weathered sandstone
20A	0-16	tan brown	loam	low area east of road
20B	16-84+	rustygreytan	weathered marine dep	compacted mottled, very compacted sedimentary; few grass roots to 48" (ss 20B = 16-40")
21A	0-16	tan brown	loam	first vineyard row near eucalyptus; most large med roots 10" to 30"
21B	16-40	greytanbrwn	clay	dense, massive blocky, plastic; fine fan distributed grape roots to 40"
21C	40+	greytanbrwn	coarse sandy loam	compacted, no roots
22A	0-30	dkcharcoal	clay	pasture plateau west of H12; Diablo clay
22B	30-50	grey tan	clay loam	fine grass roots to 50"; weathered marine sediment
22C	50-94+	camel tan	silt sand	friable, loose
23A	0-30	rustycharbrwn	loam	low area near blackberries; mineral
23B	30-54	rustycharbrwn	silt loam	somewhat peat like; grass roots thru 54"
23C	54-96	dkcharbrwn	clay	silky
23D	96-123	charcoalblue	silt clay	
24A	0-24	grey brown	clay	high area under high powerline; dense compacted, massive, blocky
24B	24-72+	camel tan	clay	fine roots thru 32"
25A	0-58	camel tan	sandy loam	friable, most grass roots thru 36"
25B	58-90+	charbrown	silt clay	silky, ribbons, moist; few fine roots to 60"
26A	0-16	chocbrown	loam	10' elevation up from oak tree; hand augered
27A	0-24	chocbrown	loam	5' elevation down from oak tree; hand augered
28A	0-16	tan brown	loam	hand augered
28B	16-24	tan coffee	clay loam	hand augered





  
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EXHIBIT 2

AN AGRICULTURAL EVALUATION OF THE STANLEY RANCH SOILS

August 27, 1984



## AN AGRICULTURAL EVALUATION OF THE STANLEY RANCH SOILS

### 1. SUMMARY

The evaluation disclosed an estimated 323 acres suitable for vineyard, 196 acres feasible for deep rooted, salt tolerant crops, and 214 acres feasible for shallow rooted, salt tolerant crops based upon a geographical classification supported by soil chemical analysis.

### 2. INTRODUCTION

An evaluation of the Stanley Ranch was implemented to determine the acres feasible for vineyard and other agricultural crops. Funds for the study were provided by the Napa Valley Ag Presevation Fund and the Napa County Land Trust.

The Stanley Ranch is located on the west bank of the Napa River in the southern portion of the county. Developed by Judge Stanley before the turn of the century, it has had a long history of livestock and forage crops. The marshes were reclaimed from the Bay by the development of a system of levees to exclude the tidewater from the land within. Gate valves to regulate the direction of water flow allowed the fresh rain water to flush out the brackish water and the mineral salts from the soils. Some of the reclaimed lands resisted leaching because of their heavy, sedimentary clays or because they were near or below sea level. On some low benches, oat hay and cereal grains dependent upon winter rainfall were grown for the local dairy and livestock industry as well as for export to the feed lots of the Bay area. On the high ground, orchards of prunes and pears were grown in the "sweet soils" where low salts and saturated soils prevailed because the trees could tolerate "wet feet". Only on the hills or high places could vineyards survive. Although a portion of the Stanley ranch was developed for vineyard in the early 1970s, a definitive feasibility survey had heretofore not been documented.

### 3. METHODS

In order to estimate the number of agriculturally acceptable acres, a back hoe soil investigation was initiated to sample and analyze the soils. By plotting the sites on a mylar transparency produced from an aerial photograph negative, a map of the soil classification was produced from which the acreage was calculated.



Prior to the aerial photographic flight, reference control sites for the back hoe inspection pits were marked on the ground for identification in the photo. Sites were selected based upon the topography and the geographical distribution of the Ranch. The flight and photograph were made on May 31, 1984 by Cartwright Aerial Surveys. Exposure was made at 12,000 feet elevation and a mylar print was produced calibrated to 200 feet per inch. A working copy blueprint was used on the survey to locate the ground markers and to identify the location of unscheduled inspection pits.

Thirty six pits were dug by a tractor mounted back hoe between June 19 and July 30, 1984. Recordings of the depth, soil color, texture, and observations were made at each soil horizon throughout the soil profile and reported in Exhibit 0. The depth of the pit was limited by the length of the hoe arm or the encounter of bedrock or inhospitable clay stratas which could limit grape vine roots.

Soil samples were submitted to Dellavalle Laboratories in Fresno. Analysis requested were pH, saturation percentage, electrical conductivity, and the concentration of calcium, magnesium, sodium, and boron.

Based upon the chemical analysis and observation of physical topographical limitations, a map of agriculturally acceptable areas was applied to the working copy. By measuring the map surface area with a planometer, a calculation of the estimated acreage was developed. Boundary information was traced back to the mylar to produce blueprint reproductions, Exhibit 1, Stanley Ranch Aerial Print, 5/31/84.

#### 4. SOIL PHYSICAL OBSERVATIONS

The Stanley Ranch was segregated into three major geographical areas: the UPPER GROUND, FLOOD PLAIN, and TIDAL MARSH. This appears to be a natural classification based upon the elevation and flooding characteristics as well as the soils textural and chemical composition. The boundaries of these divisions are illustrated on Exhibit 2, Stanley Ranch, HCM Associates, 10/20/82.

The UPPER GROUND soils are associated with the established vineyard, pasture, and the eucalyptus hedges west of the Highway 29 southern crossing approach ramp. As implied this classification is dictated by the safety from intrusion of periodic flood water. Examination of Exhibit 3, Flood Insurance Rate Map, shows the water line of the 100 year flood zone at between eight to nine foot elevation above sea level. Hence the ten foot contour line was chosen mainly because of the freedom from brackish intrusion water in the

flood zone and the salt concentration in the soils injurious to perennial plants. Some soils below the 10 foot elevation between Stanley Lane and Highway 29 were included in this classification because of the flooding barrier imposed by the highway and the disclosure of low soil salt levels in the analysis. The soils were loams and clays up to 130 inches in depth.

The FLOOD PLAIN soils are located mainly below Highway 29 and upstream from a levee near the southern crossing bridge at the Napa River. In the main, they lie within the 100 year flood zone between the ten foot elevation and sea level. They are differentiated on the surface from the tidal marsh soils by the presence of native grasses. The subsurface horizons were similar to the upper ground although in some cases they were overlying sedimentary blue-black clays inhospitable to root activity. Mostly they were characterized by deep loam profiles. The average depth of the A and B horizons of sites 16 through 32 was greater than 64" suggesting a viable media for deep rooted salt tolerant crops. Chemically the salt concentration of these soils exceeded the tolerance of most perennial crops although they were acceptable for many forage and field crops. An obvious risk on the flood plain is its vulnerability to periodic flooding during the winter and spring months following periods of excessive rainfall. During the winter of 1982-83, portions of the flood plain frequently remained submerged for periods up to two weeks as dictated by the duration and intensity of the seasons record breaking rainfall and as aggravated by high tides. Wet soils encourage the root rot pathogens as well as excluding oxygen from the roots leading to suffocation and root death.

The TIDAL MARSH soils are mainly located down stream from a levee near the southern crossing bridge at the Napa River and between the -2.0 foot sea level and approximately the ten foot above sea level elevation contour. On the surface, they are characterized by the presence of aquatic, marsh weeds. The first subsurface, A horizon was observed to be high in organic matter, but not quite a peat soil; the B and C horizon were blue to black clays and inhospitable to air and root activity yet were not anaerobic nor sour. The soil horizons above the clays were relatively shallow implying the suitability of shallow rooted, salt tolerant crops.

## 6. DISCUSSION

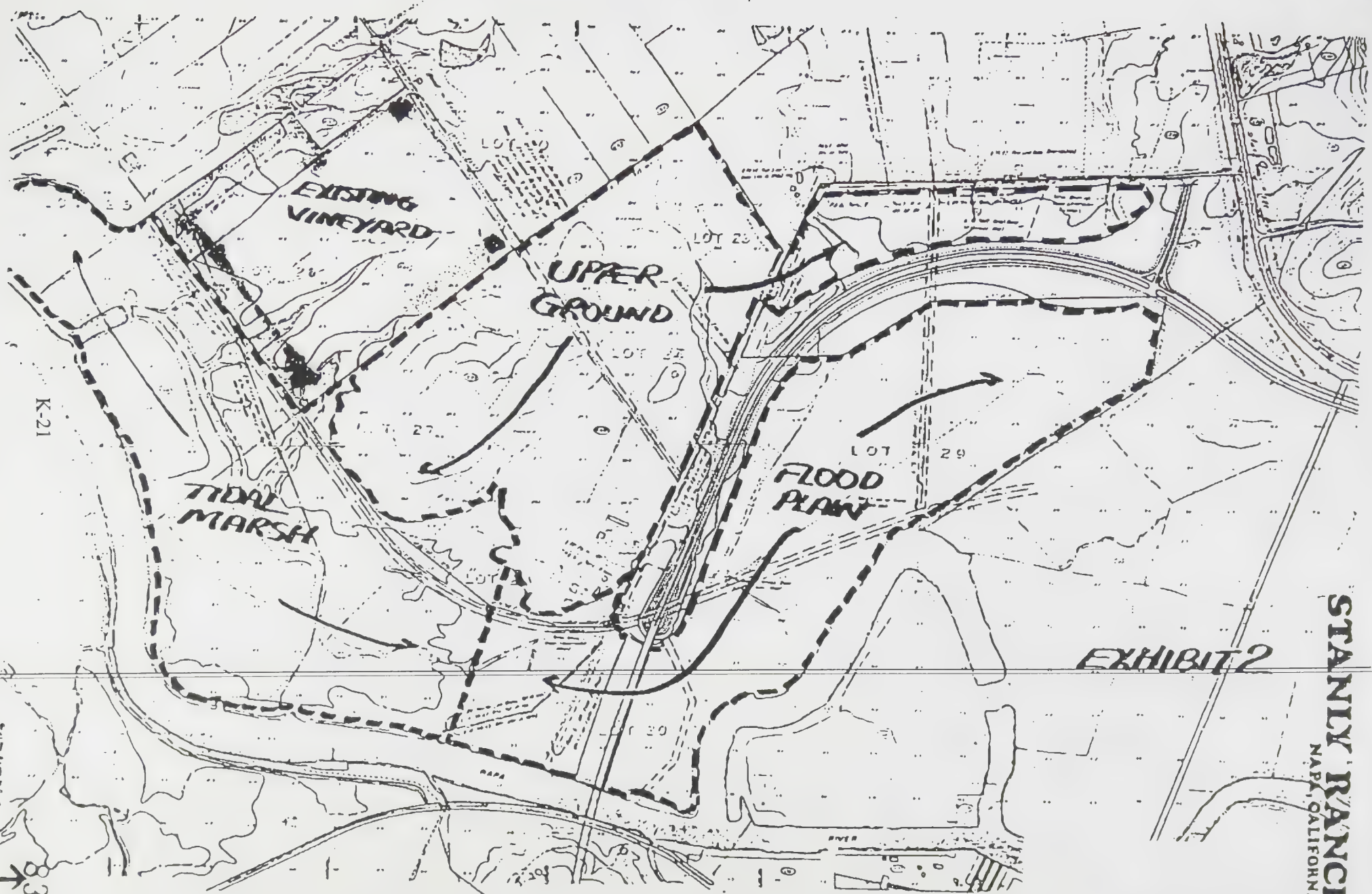
The three classifications of the Stanley Ranch Soils based upon natural physical characteristics appear to be supported by the soil chemical analysis.

Further investigations were conducted to correlate comparable crop use on similar soils. A Soil Conservation Service Land Use Survey, updated 12/31/80, confirmed the presence of many nearby vineyards. Exhibit 5 illustrates the proximal location of the Carneros Valley Investors (CVI), L.M. Martini, Beaulieu, Abruzzini, and Jacobs vineyards growing on Haire Loam soils at similar elevations suggesting the potential for viable quality vineyards at the UPPER GROUND presently designated Native Vegetation (NV) on the Survey. The FLOOD PLAIN and TIDAL MARSH areas are also designated NV but in spite of the leaching from annual rainfall and surface runoff, the salt levels are still too high for perennial tree and vine crops and it appears remote that the soils will respond to no less than major reclamation efforts such as subsurface drainage and extensive levee renovation to eliminate seasonal flooding and saline intrusions. The development and application of massive amounts of irrigation water during the summer months could complement the leaching process.

At the Stanley Ranch, native grasses and vegetation prevails because of the inability of fall planted oats to survive periods of submersion under water for periods greater than three days without substantial reductions in yields. Evidently the frequency of flooding occurs often enough to be too great a risk to success. Spring planted oats cannot be seeded early enough due to the water saturated soils which are reported to keep cattle out of the pastures until as late as May. Poor yields and low prices have apparently discouraged barley and wheat in the area.



EXHIBIT 2



K-21





EXHIBIT 3  
FLOOD INSURANCE RATE MAP

## SALINE AND ALKALI SOILS

TABLE 8.—Relative tolerance of crop plants to salt

FRUIT CROPS		
High salt tolerance	Medium salt tolerance	Low salt tolerance
Date palm	Pomegranate Fig Olive Grape Cantaloup	Pear Apple Orange Grapefruit Prune Plum Almond Apricot Peach Strawberry Lemon Avocado

VEGETABLE CROPS		
$EC, \times 10^3 = 12$ Garden beets Kale Asparagus Spinach	$EC, \times 10^3 = 10$ Tomato Broccoli Cabbage Bell pepper Cauliflower Lettuce Sweet corn Potatoes (White) Rutabaga Carrot Onion Peas Squash Cucumber	$EC, \times 10^3 = 4$ Radish Celery Green beans
$EC, \times 10^3 = 10$	$EC, \times 10^3 = 4$	$EC, \times 10^3 = 3$

FORAGE CROPS		
$EC, \times 10^3 = 18$ Alkali sacaton Sativgrass Nuttall alkaligrass Bermuda grass Rhodes grass Rearue grass Canada wildrye Western wheat- grass Barley (hay) Birdfoot trefoil	$EC, \times 10^3 = 12$ White sweetclover Yellow sweetclover Perennial ryegrass Mountain brome Strawberry clover Dallis grass Sudan grass Hubbards clover Alfalfa (California common) Tall fescue Rye (hay) Wheat (hay) Oats (hay) Orchardgrass Blue grama Meadow fescue Reed canary Big trefoil Smooth brome Tall meadow oat- grass Cicer milkvetch Sourclover Sickle milkvetch	$EC, \times 10^3 = 4$ White Dutch clover Meadow foxtail Alsike clover Red clover Ladino clover Barnet
$EC, \times 10^3 = 12$	$EC, \times 10^3 = 4$	$EC, \times 10^3 = 2$

## FIELD CROPS

$EC, \times 10^3 = 16$ Barley (grain) Sugar beet Rape Cotton	$EC, \times 10^3 = 10$ Rye (grain) Wheat (grain) Oats (grain) Rice Sorghum (grain) Corn (field) Flax Sunflower Castorbeans	$EC, \times 10^3 = 4$ Field beans
$EC, \times 10^3 = 10$	$EC, \times 10^3 = 6$	

The numbers following  $EC, \times 10^3$  are the electrical conductivity values of the saturation extract in millimhos per centimeter at 25° C. associated with 50-percent decrease in yield.

(1950). Based on field-plot studies in areas which had been inundated by salt or brackish water in 1944-45, the salinity values ("salt index," expressed as grams NaCl per liter of soil water) associated with 75 percent of normal yields for 14 crops were determined. Despite obvious differences in climate and cultural practices, Van den Berg's results for relative salt tolerance are in good agreement with those in table 8.

## Relative Boron Tolerance of Crop Plants

Plant species differ markedly in their tolerance to excessive concentrations of boron. In sections where boron tends to occur in excess in the soil or irrigation water, the boron-tolerant crops may grow satisfactorily, whereas sensitive crops may fail. The relative boron tolerance of a number of crops was determined by Eaton (1935), and his results are reported in table 9 with

TABLE 9.—Relative tolerance of plants to boron

[In each group, the plants first named are considered as being most tolerant and the last named most sensitive.]

Tolerant	Semi-tolerant	Sensitive
Athel ( <i>Tamarix</i> <i>aphylla</i> ) Asparagus Palm ( <i>Phoenix</i> <i>canariensis</i> ) Date palm ( <i>P. dactylifera</i> ) Sugar beet Mangel Carden beet Alfalfa Cladulus Broadbean Onion Turnip Cabbage Lettuce Carrot	Sunflower (native) Potato Acala cotton Pima cotton Tupelo Sweet pea Radish Field pea Ragged Robin rose Olive Barley Wheat Corn Milo Oat Zinnia Pumpkin Bell pepper Sweet potato Lima bean	Peanut Black walnut Persian (English) walnut Jerusalem arti- choke Navy bean American clover Plum Pear Apple Grape (Sultana and Malaga) Kadota fig Persimmon Cherry Peach Apricot Thornless black- berry Orange Avocado Grapefruit Lemon



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**Appendix L**  
**WATER DEMAND BACKGROUND INFORMATION**

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**STANLY RANCH****ESTIMATED WATER USAGE**

**(Update to information contained in Section D-Water of the "STANLY RANCH  
PRELIMINARY UTILITY STUDY" by Ruggeri-Jensen-Azar and Associates,  
Dated May 1997, Revised August 1997.**

**INTRODUCTION:**

**Background:** On November 18, 1997, the Napa City Council adopted the resolution approving the Water System Optimization and Master Plan (The Plan) and certifying the accompanying FEIR. This action resulted in establishing accepted historical water demand factors for various uses within the City of Napa. In November and December, information was supplied to the SRSP EIR consultants which updated the previously supplied project potable water demand estimates. The updated information utilized information in The Plan. In addition, the areas proposed for irrigation with reclaimed water were further defined and these were supplied also.

**Purpose:** The purpose of this document is to formally incorporate the information into one, organized format, to further the discussion on the proposed project's "net water potable demand" and to identify impacts to the City of Napa potable water system.

**Intended Use:****DOMESTIC (POTABLE) WATER:**

**Project Potable Water Demand:** Table 2, Column A shows the estimated average potable water demand for the proposed Stanly Ranch project in gallons per day (gpd). The calculations are based on demand factors presented in the City of Napa Water System Optimization and Master Plan. These factors are based on historical, city-wide usage, and thus do not account for the current requirement of low flow plumbing fixture installation in new developments. The total estimated project demand, based on demand factors from The Plan, is termed "gross demand" and is shown in Total 1, Column A of Table 2.

**Existing Potable Water Demand:** The existing land uses on the Stanly Ranch Property include a residence, an office and a vineyard. Water consumption information based on billing records, was supplied by the City of Napa, and is summarized in Table 2.

TABLE 1  
STANLY RANCH  
Existing Potable Water Demand

<u>Year</u>	<u>Total Usage (1000 gal)</u>	<u>Ave. Daily (gpd)</u>
1994	8,265	22,644
1995	5,278	14,460
1996	6,439	17,641
1997	7,707	<u>21,115</u>
<b>Average Usage</b>		<b>18,965</b>

Total 2, Column A of Table 2 shows this existing demand

**Water Retrofit Program:** The City of Napa "Offsite Retrofit Program for New Development" states the following purpose:

"This program is intended to allow development to continue throughout the City of Napa without causing an increase in city water use, and to create long-term water savings which otherwise would not occur."

The following measures will be implemented by the project:

1. On-site related measures:

- Mandated use of ultra low-flow toilets and low-flow showers for all new construction on the site.
- All areas requiring City-approved landscape plans must install drought-tolerant landscaping in accordance with State law.
- Estimated water demand savings due to on-site water saving devices is shown as Total 3, Column A of Table 2.

2. Off-site related measures

- Retrofit four existing homes with low-flow plumbing fixtures for each new single family home built.
- Other retrofit per the City of Napa Offsite Retrofit Program.
- Water savings due to the off-site retrofit program is shown as Total 4, Column A of Table 2. Note that the number of retrofits used for this calculation is lower than the City of Napa initial estimates for the project. If the City's initial number of retrofits are installed, the City would experience a net savings of potable water due to the Stanly Ranch project.

**Net Project Potable Water Demand:** Total 5, Column A of Table 2 shows the net projected project potable water demand, based on the above mentioned items. The final retrofit requirements should not be less than those used to achieve this balance.

**Impacts- Potable Water System:** The City of Napa General Plan and accompanying EIR documents cite sufficient water supply for the City's planned growth, including the Stanly Ranch area. The domestic water service to the site will be provided by construction of the on-site distribution lines. The existing 36" city water main will provide the necessary flow and pressure for the Stanly Ranch project. All domestic water mains located in the private and public streets will be owned and maintained by the City of Napa. All private streets will be public utility easements to allow for city maintenance. Adherence to the water Retrofit Program will be achieved.

The Stanly Ranch project, being located within the RUL, is included in the General Plan Study Area. The General Plan anticipates and accommodates the Stanly Ranch development. The impacts to the water system and supply will be less than significant.



**TABLE 2  
STANLY RANCH  
ESTIMATED OVERALL AVERAGE WATER DEMAND**

WATER	Land Area (acres)	Units/ Bldg. Area (ea/sf)	Av. Demand per unit/sf (gpd/ea or/sf)	(A) Potable Water Av. Demand (gpd)	(B) Recl. Water Av. Demand (gpd)	Total Average Potable & Recl. Water Demand (gpd)
<b>Residential</b>						
Single Family	89.50	420.00 ea	343.00	144,060		144,060.00
Multi-Family	10.00	120.00 ea	180.00	21,600		21,600.00
Nhood Parks	2.00		1,360.00		2,720.00	2,720.00
Employee Housing	<u>3.50</u>	54.00 ea	180.00	9,720		9,720.00
	105.00					
<b>Resort</b>						
Guest Units-a	14.00	200.00 ea	180.00	33,120		33,120.00
Carefree Club fr sale units-a	8.00	100.00 ea	180.00	16,560		16,560.00
Restaurant	0.50	10,000 sf	0.73	7,300		7,300.00
Retail	0.50	1,200.00 sf	0.03	36		36.00
Spa	2.00	12,000.00	0.29	3,480		3,480.00
Support Svcs/Lodge/Pkg	18.00			4,500		4,500.00
Resort open space	<u>15.00</u>		1,360.00		20,400	20,400.00
	58.00					
<b>Golf Facilities</b>						
Clubhouse	7.00	11,000.00 sf	0.29	3,190		3,190.00
Maintenance	3.00	4,500.00 sf	0.06	270		270.00
Course	<u>169.00</u>				178,000.00	178,000.00
	179.00					
<b>Commercial</b>						
Restaurant	1.00	6,000.00 sf	0.73	4,380		4,380.00
Grocery	1.00	5,000.00 sf	0.31	1,550		1,550.00
Retail	4.00	29,000.00 sf	0.03	870		870.00
Winery	4.00	40,000.00 sf	0.66	26,400		26,400.00
Open space	<u>2.00</u>		1,360.00		2,720.00	2,720.00
	12.00					
<b>Interpretive Center</b>	2.00	3,000.00 sf	0.07	210		210.00
<b>Major Roads</b>						
Stanly Lane Paving	8.00					-
Stanly Land Landscaping	6.00		1,360.00		8,160.00	8,160.00
Old Suscol Lane Paving	4.50					-
Old Suscol Lane Lndscping	<u>0.50</u>		1,360.00		680.00	680.00
	19.00					
<b>Fire Station</b>		5,000.00	0.28	1,400		1,400.00
Fire station landscaping	2.50		1,360.00		3,400.00	3,400.00
<b>Vineyards &amp; Landscape buffers</b>	109.50		1,360.00		148,920.00	148,920.00
<b>Storm Drn Treatment Ponds</b>	6.00				32,000.00	32,000.00
<b>Lowlands</b>	425.00				-	-
<b>1 Av. Project Demand-Gross</b>	918.00			278,646	397,000.00	675,646.00

2	Existing Av. Potable Water Demand:	(18,965)
3	Subtotal - Prior to Retrofits	259,681
4	Savings from Project Wtr Sav. Devices	(48,453)
5	Savings from required Retrofit Program: (based on 3,305 retrofits)	(206,504)
5a	Savings from voluntary Retrofits: (based on 336 add'l retrofits)	(20,994)
6	Net Project Potable Water Demand (Savings)	(16,270)

a Demand for the resort units are reduced to 92% to account for 80% occupancy during the 5 winter months

Source: RJA, as adjusted by City Water Division

## RECLAIMED WATER

**Napa Sanitation District (Nsd):** The NSD water treatment facility is located across the Napa River from the Stanly Ranch property. The plant will provide tertiary treated reclaimed water for contract users. The truck main distribution system for the reclaimed water does not exist. The NSD has obtained permits to extend the reclaimed water main across the Napa River. The intent is to install a reclaimed water main through the Stanly Ranch property to the existing vineyards to the west. The District is continuing discussions to determine if this line will be installed. If the NSD has not installed a distribution system through Stanly Ranch when the reclaimed water is needed, the project will be extending a line, utilizing the permits obtained by the NSD.

**On-site Reclamation Facility:** An alternative source of reclaimed water from an on-site reclamation facility. If the reclamation facility is chosen, flow may be augmented with NSD reclaimed water.

**Reclaimed Water Uses:** Reclaimed water will irrigate the golf course areas, vineyards, and landscaping in the resort, common areas, open space, parks, roadways, etc. The irrigation system will be connected to reclaimed water mains at various points as hydraulically required. The NSD has stated that pressure will be sufficient to serve the Stanly Ranch Area from a main connected to their system. The on-site reclamation system would include booster stations to supply the required pressure. Column B of Table 2 shows the estimated reclaimed water demand for the project.

**Impacts- Reclaimed Water System:** The potential impacts of the project primarily focus on the application of reclaimed effluent onto the project golf course as irrigation. Improperly treated wastewater has the potential to leach high concentrates of nitrates into the groundwater table. In addition, the proposed wastewater storage reservoir may also leach excessive nitrates into the ground water in the region.

The on-site wastewater reclamation facility will be designed and operated in such a manner as to ensure production of high quality effluent conforming to Title 22 standards for the intended application and limiting the nutrient content of the effluent to moderate values suitable for absorption by the turf of the golf course, thereby ensuring compliance with the prohibition regarding ground water nitrate impacts.

During the golf course design phase, a design-level Management Plan (Plan) to protect surface water quality will be prepared. Improper irrigation consisting of substantial over-watering that results in large amounts of irrigation water running off and entering a surface drainage will not be allowed. The Plan will include Best Management Practices (BMPs) for storm water quality protections and will be designed to reduce the impacts from the golf course irrigation to a less than significant level. The Plan will emphasize the use of structural and biological approaches to golf course maintenance, in place of chemical application, as possible.

Golf course runoff will be routed through grassed swales, and ponds to provide water quality treatment bene

The storage reservoirs will be operated in such a manner as to maintain a positive barrier between the effluent the reservoir and underlying groundwater.

With these measures in place, the nitrate returns from the operation of the golf course will be no more than would under normal, high-standard golf course greens keeping operations. Therefore, the project will have a less than significant water quality impact in the project area.



## MEMORANDUM

**Date:** April 15, 1998  
**To:** Jean Hasser, City of Napa  
Don Ridenhour, City of Napa  
Rhodora, Baseline  
**From:** Armintha Jensen  
**Re:** Stanly Ranch  
Water Demand

**Job #:** 962035

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This memo addresses the water demand calculation for the Stanly Ranch project and how it relates to the City of Napa Water System Optimization and Master Plan (WSOMP).

**WSOMP:** Chapter 3 of the WSOMP addresses present and projected water demands for the City of Napa. Utilizing historic, City wide water production and use patterns, the plan develops estimated unit demand figures for various land uses. The total projected water demand was then calculated. This total demand at buildout was then reduced by 8% overall to reflect savings due to the City's water conservation program. This estimate reflects savings resulting from the implementation of 16 Best Management Practices (BMPs) which range from distribution system leak detection and repair, to large landscape water audits and incentives, to new and retrofit plumbing. The estimated 8% reduction was applied to the total buildout demand (existing plus future) and is an overall average. It does not reflect actual anticipated savings for any one project.

**Stanly Ranch Water Demand:** The Stanly Ranch project proposes an aggressive domestic water conservation program. Most important to this program is the project's intensive use of reclaimed water for landscape irrigation. The project is proposing participation in the offsite water retrofit program beyond the City mandate to offset project water demand and waste water flow production.



The estimated water demand for the Stanly Ranch is summarized as follows:

Average Gross Project Demand	278,641 gpd
<u>Existing average water usage</u>	<u>18,965 gpd</u>
Net water demand, prior to conservation:	259,681 gpd
Onsite conservation savings	(48,453)gpd
Savings from offsite retrofit, City Mandated (3,305)	(206,503)gpd
Savings from offsite retrofit, <u>Volunteer Additional (336)</u>	<u>(20,994)gpd</u>
Net project water demand (savings)	(16,269)gpd

**WSOMP vs. Stanly Demand:** The WSOMP future demand allocation for the Stanly Ranch project is 0.23 MGD, average. In addition, the existing demand of 0.019 MGD for the Stanly Ranch is included in the WSOMP, resulting in a total estimated water demand for the Stanly Ranch project of 0.249 MGD. This is the total estimated demand prior to any estimated savings due to water conservation measures. It is not possible to quantify the WSOMP after-conservation demand for the Stanly Ranch project due to the fact that the overall 8% reduction does not reflect savings for any one project. However, it can be verified that the Stanly Ranch net project demand reflects that expected by the WSOMP as follows:

- Stanly Ranch will participate in/implement all of the applicable 16 BMPs for City Urban Water Conservation, thereby achieving the expected savings for the flows anticipated in the WSOMP.
- Stanly will be installing offsite retrofits in addition to the City mandated retrofits. The savings from these additional retrofits will offset the additional demand as follows:

Stanly est. demand prior to conservation	0.260 MGD
<u>WSOMP est. demand for Stanly prior to conservation</u>	<u>0.250 MGD</u>

Difference: 0.010 MGD

Savings due to offsite retrofits in addition to City mandate (0.016)MGD

Net project water demand (savings): (0.006)MGD

**Summary:** The water conservation program proposed by the Stanly Ranch project will result in flows and water savings which are compatible with the City of Napa WSOMP.

cc: Tom Kambe  
Fred Etzyl

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100 N. Milpitas Blvd., Suite 160 Milpitas, CA 95035 (408) 934 - 1388 Fax: (408) 934 - 1288

**Appendix M**  
**ON-SITE WASTEWATER SYSTEM**  
**ALTERNATIVE MITIGATION MEASURES**

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**Appendix M**  
**ON-SITE WASTEWATER SYSTEM**  
**ALTERNATIVE MITIGATION MEASURES**

■ ■ ■

**A. Mitigation Measures**

The following are mitigation measures for the On-Site Wastewater System Alternative. The mitigation measures that apply only to this alternative and not to the proposed project are shown in **bold text**.

**1. Land Use**

Mitigation Measure LU-1: The following measures shall be implemented to reduce the potential for land use conflicts with adjacent agricultural uses:

- The Specific Plan (SP) zoning regulations shall be amended to incorporate and apply provisions of Chapter 17.60.090A to all residential and resort unit properties adjacent to or within 300 feet of the RUL line. These provisions include:
  1. A minimum 80-foot setback of any dwellings or structures designed for human habitation from the RUL line. This setback shall include a minimum 15-foot landscaped buffer designed to provide a clear boundary between urban and agricultural uses.
  2. Sound/noise reducing design and construction techniques shall be required at the tentative map or use permit stage, whichever is applicable, to reduce noise levels to occupants from adjoining farm operations to acceptable interior levels as defined in the Noise section of this EIR.
  3. A recorded notice to run with the land that these properties may be subject to agricultural impacts (such as the dust, noise, agricultural chemicals and odors associated with operation of nearby farms or vineyards), and that the nearby farmer/grower/rancher has the “right-to-farm” and the property owner may not sue to prevent such activities normally associated with agricultural activities. This notification shall include positive assurance that a prospective buyer has received this information.



- The SP zoning shall require attractive landscaping and fencing between the Bay Trail and adjacent lands beyond the RUL line, provision of barriers to prevent unauthorized motor vehicle use, and signs describing rules of operation at appropriate locations.

Mitigation Measure LU-2: Implementation of the mitigation measures identified in the Public Policy section of the EIR related to easements and disclosure statements for on-site property owners shall be implemented to reduce potential airport-related land use incompatibilities, including, noise and overflight annoyance.

## **2. Public Policy**

Mitigation Measure POL-1a: The applicant shall implement mitigation measures identified in Sections IV.C, IV.J, IV.K: Transportation, Public Services, and Public Utilities of the EIR. These measures would reduce impacts on service providers and infrastructure.

Mitigation Measure POL-1b: Should the *Draft SRSP* be approved prior to adoption of the *Draft General Plan*, the *Draft SRSP* General Plan Amendment shall specify use of the Congestion Management Plan standards and *Draft General Plan* policy T2.2 for SR 12/121 and 29/12, and *Draft General Plan* standard for City streets significantly affected by the proposed project. Policy T2.2 ensures that development meets LOS standards unless findings are made that achieving other specific public goals in the *General Plan* outweigh this requirement.

Mitigation Measure POL-1c: The *Draft SRSP* General Plan Amendment shall include proposed street standards for the Stanly Ranch.

Mitigation Measure POL-1d: Through the Development Agreement, the applicant and City shall investigate means of providing more on-site commercial uses within the proposed wine center to meet everyday needs such as dry cleaning, banking, and grocery facilities for residents and employees.

Mitigation Measure POL-1e: Should the *Draft SRSP* be adopted prior to adoption of the *Draft General Plan*, the *Draft SRSP* General Plan Amendment shall include an exception to Policy B7b to permit mixed-use projects where substantial traffic reduction programs and urban services are provided on-site.

Mitigation Measure POL-1f: Should the *Draft SRSP* be adopted prior to adoption of the *Draft General Plan*, the *Draft SRSP* General Plan Amendment shall modify Policy PR 1.12 to permit credits to be given for the provision of private recreational facilities.

Mitigation Measure POL-1g: The applicant shall implement Mitigation Measure LU-1, which addresses impacts related to agricultural/urban conflicts.

Mitigation Measure POL-1h: On Home Hill (Neighborhood 2), the applicant shall eliminate the easternmost six townhomes and the proposed easternmost row of homes to the second cul-de-sac/circle (approximately 36 lots). At the earliest possible time as part of Phase 1, the applicant shall replant this area with a new tree grove comprised of native and ornamental tree species, including evergreens of sufficient height to screen two-story homes within five years of planting.

Mitigation Measure POL-2a: The *Draft SRSP* (p. 13) shall be corrected prior to adoption to refer to Figure 5 as the *Draft SRSP* Land Use Plan, not the land use designations identified by the *Draft General Plan* for the project site. (If the *Draft SRSP* is approved, this map with any changes approved by the City Council would become the *General Plan* land use plan for the Stanly Ranch.)

Mitigation Measure POL-2b: The *Draft SRSP* General Plan amendment shall include an exception to *Draft Policy Document* Multi-Family Residential (MFR) language to permit densities greater than 15 units per acre on the Stanly Ranch where such units are low-income housing.

Mitigation Measure POL-2c: The *Draft SRSP* Appendix B (Land Use and Development Standards and Zoning) shall be amended to incorporate and apply the provisions of Section 17.60.090 of the Zoning Ordinance regarding agricultural buffers for residential and resort units within 300 feet of the RUL, as also recommended in Mitigation Measure LU-1.

Mitigation Measure POL-2d: Residential units within 15 percent (+) slope areas of Home Hill (Neighborhood 2), and development on Cistern Hill shall comply with use permit, grading, Hillside Design Guidelines, and alternative development standards of the Hillside Overlay District.

Mitigation Measure POL-2e: Through the Development Agreement, the applicant and City shall investigate means of providing more on-site commercial uses within the proposed wine center to meet everyday needs such as dry cleaning, banking, and grocery facilities for residents and employees.

Mitigation Measure POL-2f: The Stanly Ranch General Plan amendment shall include street standards for the proposed project.

Mitigation Measure POL 3: Implementation of the following modifications and corrections to the proposed zoning and development regulations set forth in Appendix B of the *Draft SRSP* would reduce this impact to a less-than-significant level:

- The *Draft SRSP* Appendix B (Land Use and Development Standards and Zoning) shall be revised to incorporate and apply the provisions of Section 17.60.090 of the Zoning Ordinance regarding agricultural buffers for homes and resort units within 300 feet of the RUL in the proposed SP Zone 2 Residential District and the SP Zone 1 Resort District as described in more detail in Section IV.A, LU-1.
- Residential units within 15 percent (+) slope areas of Home Hill (Neighborhood 2), and development on Cistern Hill shall comply with use permit, grading, Hillside Design Guidelines, and alternative development standards of the Hillside Overlay District.

### **3. Transportation and Circulation**

Mitigation Measure TRANS-1: An emergency evacuation plan shall be developed for the site, including the identification of emergency evacuation routes and the training of staff in traffic control as well as traffic control activities such as directing visitors during emergencies. The evacuation plan shall also include an annual review with the appropriate City departments regarding field procedures. The initial and subsequent annual emergency plans shall be reviewed and approved by the City prior to approval of any building occupancy.

Mitigation Measure TRANS-2: The project shall construct a traffic signal at the intersection of State Route 12/121 and Stanly Lane. The signal shall be operational by occupancy of the main resort.

Mitigation Measure TRANS-3: The following combination of mitigation measures shall be implemented:

- To mitigate the impacts on the State Route 12/29/121 intersection for the “Cumulative-Plus-Project” scenario, the project applicant shall pay Street Improvement Fees based on the rates in effect at the time of building permit issuance.
- To assist in developing a long-term solution for the intersection in a timely manner for this project and other future traffic, the applicant shall develop the Caltrans Project Study Report (PSR) which evaluates and develops costs for the long-term improvements noted above. The applicant may receive credit from the Street Improvement Fees for costs associated with the PSR.
- If feasible, the project may construct a portion of the long term improvement approved in the PSR report and receive Street Improvement Fee credit for costs associated with the construction.



Mitigation Measure TRANS-4: To mitigate the impacts at the State Route 29 northbound ramp intersection at Imola Avenue, the project shall pay standard City street improvement fees.

Mitigation Measure TRANS-5: One of the following measures shall be implemented:

- To mitigate the impacts at the intersection of Cuttings Wharf Road and State Route 12/121, for the Existing-Plus-Project scenario, the applicant shall contribute the project's fair contribution toward the installation of a traffic signal at this location. The project contributes 9.8 percent of the traffic during the weekend peak hour. As the City does not have jurisdiction at this intersection, the project fees should be held in a City trust account for the construction of a signal at this location. Further, the installation of a traffic signal at this location would only be provided once Caltrans signal warrants are met (PS: Short Term) (LTS: Long Term), or
- To mitigate project impacts at the intersection of Cuttings Wharf Road and State Route 12/121, for the Existing-Plus-Project scenario, the project shall construct a full acceleration lane for traffic exiting Cuttings Wharf Road onto westbound SR 121/121. This mitigation would require widening SR 12/121 to the east and west of Cutting Wharf Road to maintain one travel lane in each direction. This improvement would eliminate the westbound (mainline) traffic from the LOS calculation resulting in significant improvement to the Existing-Plus-Project condition.

Mitigation Measure TRANS-6: The following combination of mitigation measures shall be implemented:

- A detailed traffic control plan shall be prepared for construction of any improvements to SR 12/121 and the public portion of Stanly Lane (up to 500 feet south of the SR 12/121 intersection). The plan must satisfy City, County and Caltrans requirements for traffic flow in their various jurisdictions. In addition, a plan shall be developed to assure that any construction traffic attributable to on-site development does not contribute to significant impacts on the public roadway system. The plan shall be approved by the City and Caltrans as appropriate prior to the issuance of any building permits for either on-site or off-site roadway construction.
- All required public frontage and street improvements shall be designed and built in accordance with Caltrans and/or City of Napa ordinances and the *Public Works Department (PWD) Standard Specifications*, unless otherwise approved by the Public Works Director.
- During non-working hours, open trenches shall be provided with appropriate signage, flashers, and barricades approved by the street superintendent to



warn oncoming motorists, bicyclists and pedestrians of potential safety hazards.

- All road surfaces shall be restored to pre-project conditions after completion of any project activities.

#### **4. Geology, Soils, and Seismicity**

Mitigation Measure GEO-1: Although the potential for strong seismic shaking cannot be eliminated at the project site and surrounding area, all of the following mitigation measures shall be implemented to reduce the impacts related to expected strong ground shaking to less-than-significant levels:

- All structures proposed for the project shall be designed and constructed in accordance with the provisions of the most recently adopted California Building Code. Issuance of building permits shall not be approved until after review and approval of building design to ensure compliance with the provisions of the Code by the City Public Works Department.
- The master developer shall prepare an earthquake preparedness and emergency response plan for all public use facilities, including the golf clubhouse, the wine center, and resort lodge. The plan shall be submitted for review and approval by the City Department of Public Works prior to occupancy of the structures.
- Prior to occupation of residential units at the project site, an earthquake hazards information document shall be prepared by the applicant and made available to any potential occupants. The document shall describe the potential for strong ground shaking at the site, potential effects of such shaking, and earthquake preparedness procedures.

Mitigation Measure GEO-2: The following combination of mitigation measures shall be implemented to reduce the impacts related to liquefaction of site soils during strong ground shaking:

- Prior to construction of any structures for human habitation or other improvements within areas of the site mapped as bay mud, an evaluation of the potential for liquefaction shall be performed by a licensed Geotechnical Engineer or Certified Engineering Geologist. The evaluation shall be based on site-specific subsurface data and shall conform with the California Division of Mines and Geology "Guidelines for Evaluating Seismic Hazards in California" (CDMG, 1997). The evaluation shall also address the potential for damage to building foundations, pavements and utilities due to settlement under static (non-seismic) conditions. A report of the evaluation shall be prepared and submitted to the City Department of Public Works prior to the issuance of a building permit.

- All water supply and wastewater pipelines constructed in areas mapped as bay mud shall be designed to minimize the potential for damage in the event of strong ground shaking and potential liquefaction. The pipeline design shall be prepared by a licensed engineer with experience in design and construction in areas of high liquefaction potential.

Mitigation Measure GEO-3: The following mitigation measure would reduce the potential for the adverse effects of soils on buried utilities:

- All buried utilities and other structures shall be designed by a qualified licensed engineer and constructed to provide corrosion protection. Corrosion protection could include cathodic protection for metallic materials, providing noncorrosive coatings for corrosive metals, use of noncorrosive materials, or placement of noncorrosive backfill around buried structures.

## **5. Hydrology, Drainage, and Water Quality**

Mitigation Measure HYDRO-1: No net increase in fill within the Corps-designated flood plain shall be permitted in any phase of the project or for the project as a whole. Any placement of fill within the flood plain shall be mitigated by removal of an equal or greater amount of material from the flood plain in a different location. Prior to approval of the final grading plan, the applicant shall quantify the amount of fill proposed for placement (and removal) in the flood plain. The City of Napa shall not approve the final grading plan unless the applicant has demonstrated that the “no net fill” in the flood plain criterion has been met. Under no circumstance shall fill be placed in the flood way without express authorization of the City of Napa Public Works Department.

Mitigation Measure HYDRO-2a: The applicant shall prepare and implement a Storm Water Pollution Prevention Plan (SWPPP) designed to reduce potential impacts to surface water quality through the construction and life of the project. The SWPPP would act as the overall program document designed to provide measures to mitigate potential water quality impacts associated with implementation of the *Draft SRSP* (and include the Integrated Pest Management Plan (IPMP), Chemical Application Management Plan (CHAMP), and Water Quality Monitoring Plan). The SWPPP shall include:

- *Specific and detailed BMPs designed to mitigate construction-related pollutants.* These controls shall include practices to minimize the contact of construction materials, equipment, and maintenance supplies (e.g., fuels, lubricants, paints, solvents, adhesives) with storm water. The SWPPP shall specify properly-designed, centralized storage areas that protect these materials from the rain.

An important component of the storm water quality protection effort is knowledge on the part of the site supervisors and workers. To educate on-site personnel and maintain awareness of the importance of storm water quality protection, site supervisors shall conduct regular "informal tailgate" meetings to discuss pollution prevention. The frequency of the meetings and required personnel attendance list shall be specified in the SWPPP.

The SWPPP shall specify a monitoring program to be implemented by the construction site supervisor, and must include both dry and wet weather inspections. Erosion control BMPs contained in the SWPPP shall be incorporated in the project grading and erosion control plan, which is reviewed and approved by the City. City of Napa personnel shall conduct regular inspections to review compliance with the grading and erosion control plan (this is already standard procedure). RWQCB personnel, who may make unannounced site inspections, are empowered to levy considerable fines on the developer if it is determined that the SWPPP has not been properly prepared and implemented.

BMPs designed to reduce erosion of exposed soil may include, but are not limited to: soil stabilization controls; watering for dust control; perimeter silt fences; placement of hay bales; and sediment basins. The potential for erosion is generally increased if grading is performed during the rainy season as disturbed soil can be exposed to rainfall and storm runoff. If grading must be conducted during the rainy season (between October 15 and April 1), the primary BMPs selected shall focus on erosion control, that is, keeping sediment on the slopes. End-of-pipe sediment control measures (e.g., basins and traps) shall be used only as secondary measures. If hydro seeding is selected as the primary soil stabilization method, then slopes shall be seeded by September 1 and irrigated to ensure that adequate root development has occurred prior to October 1. In addition, all grading conducted during the rainy season shall be conducted under a DPW-approved erosion and sediment control plan. Entry and egress from the construction site shall be carefully controlled to minimize off-site tracking of sediment. Vehicle and equipment wash down facilities shall be constructed and designed to be accessible and functional both during dry and wet conditions.

- *Specific and detailed BMPs designed to mitigate post-construction-related pollutants.* The SWPPP shall include all provisions of the conceptual Water Quality Management Plan submitted by the applicant (Appendix F), including specific details about each BMP function, location, and size (including details regarding biofilters, wet ponds, infiltration systems, and porous paving). In addition, the following mitigations shall be incorporated into the SWPPP and its supporting plans:



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- (a) The IPMP and CHAMP (which are part of the SWPPP) shall cover the golf course, orchard, vineyards, and common landscaping areas. The plans shall be implemented by the Stanly Ranch Community Owners Association or other appropriate entity.
- (b) The inspection and maintenance plan for the treatment control BMPs shall be prepared by a Professional Engineer or Registered Geologist with expertise in erosion and sediment control. The plan shall include criteria for characterization of sediment removed from detention structures, reuse of the sediment on-site, or disposal at an appropriate off-site disposal facility. Chemical characterization of the sediments, shall at a minimum include analyses for heavy metals (cadmium, chromium, nickel lead, and zinc), total petroleum hydrocarbons, diazinon (using enzyme-linked immunosorbent assay (ELISA)), and chlorpyrifor (using ELISA). Chemical characterization shall be conducted for each sediment removal event from detention structures and completed in accordance with the U.S. Environmental Protection Agency's Test Methods for Evaluating Solid Waste (SW-846). Sediment determined to be of adequate quality (i.e., non-hazardous and/or below Preliminary Remediation Goals (PRGs) for residential land use, as established by U.S. EPA), can be used on-site. If, after five years of monitoring, results indicate that the sediments are non-hazardous and below PRGs, monitoring may be discontinued. The plan shall be implemented by the Stanly Ranch Community Owners Association or other appropriate entity.
- (c) The water quality monitoring plan (which is part of the SWPPP and covers the entire project site) shall be prepared by a Professional Engineer or Registered Geologist with expertise in surface and groundwater quality (professional). Baseline surface and groundwater quality monitoring stations shall be established and monitored prior to beginning of construction, through the construction period, and for a minimum of five years after the completion of construction with the approval of the City Department of Public Works. Water quality monitoring within the Napa River would not be a requirement of the plan. Surface water samples shall be collected within one hour after the initiation of runoff at each station during a significant storm (preferably the first storm of the water year to characterize the "first flush"). Subsequent water quality samples shall be collected at each station during storms at least twice per year. Preparers of the monitoring plan shall consult with the Regional Water Quality Control Board to develop a list of sampling parameters. The analyses considered should include pesticides (including, but not limited to, acephate, diazinon (by ELISA methodology), ethoprop, f. sulfoxide,
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methamidophos, simazine, and chlorpyrifos (by ELISA methodology)), heavy metals (cadmium, chromium, nickel, lead, and zinc), biological oxygen demand, chemical oxygen demand, total suspended solids, total dissolved solids, total phosphorous, TKN, NO<sub>2</sub>, and NO<sub>3</sub>. The monitoring and mitigation program shall be largely self-directed; that is, the Stanly Ranch Community Owners Association or other appropriate entity shall not wait for direction from the RWQCB or other agency if the data indicate pollutant levels exceeding estimated baseline conditions (or detectable levels of pesticides) are present. If pollutant levels in the runoff exceed estimated baseline conditions, the professional should recommend, and the applicant should implement, prompt and effective measures to prevent subsequent exceedances.

Mitigation Measure HYDRO-2b: The Public Works Department shall review the SWPPP prior to approval of grading plans to ensure that the requirements listed above are included in the plan. Copies shall be provided to the RWQCB for their review.

Mitigation Measure HYDRO-2c: The winery shall obtain a NPDES permit from the Regional Water Quality Control Board prior to establishment of that use.

As a practical matter, even after implementation of all mitigation measures described above, some pollutants not formerly associated with the site, may have impacts on receiving water quality. However, the mitigation measures described above are rigorous by industry standards and the monitoring plan would be designed to detect increases in pollutant loading relative to existing conditions. Remedial actions would be required if pollutant loading was observed to increase. Further, former agricultural land uses (i.e. grazing in the Lowlands) have negative water quality impacts of their own (grazing is associated with increased ammonia levels and biological oxygen demand and sedimentation). Therefore, from the perspective of runoff water quality in receiving waters, the project may actually result in a net benefit. However, because water quality impacts to receiving waters cannot be guaranteed to be less than significant, the impact (after mitigation) is defined as potentially significant.

Mitigation Measure HYDRO-3: The applicant shall acquire a letter of agreement from PG&E documenting PG&E's commitment to maintain the levee segment providing access to their valve controls for as long as access to their valve controls is needed. The applicant shall submit a copy of the letter to the City of Napa for review and approval. The City shall not approve the final grading plans prior to receipt of this letter of commitment.

The City shall be willing to accept or work out other arrangements for long-term maintenance responsibility for portions of the levee on which it accepts public trails.

## **6. Biological Resources**

Mitigation Measure BIO-1a: The impact to wetlands from the Project River Trail shall be minimized by a design that minimizes fill.

Mitigation Measure BIO-1b: Fill of wetlands shall be minimized during repair or reconstruction of the levee for the proposed Project River Trail. Repair or reconstruction of the levee shall be done in consultation with the CDFG, National Marine Fisheries Service, USFWS, and the Corps. The City shall sign off on Corps mitigation plans requiring “no net loss” of wetlands.

Mitigation Measure BIO-1c: In areas where fairways span wetlands, fencing shall be provided to prevent entry into wetlands by golfers. Trails shall be routed across or around these wetlands to channel access within a small area. Tee areas, fairways, and holes shall be designed to minimize fill of wetland areas.

Mitigation Measure BIO-1d: The minimum width possible for Stanly Lane shall be maintained at the crossings of the watercourses.

Mitigation Measure BIO-1e: The grading plan shall be revised to avoid the wetland near the employee housing area. Best Management Practices (BMPs) shall be used to prevent sedimentation of this wetland during construction. (See the Hydrology, Drainage, and Water Quality section of Chapter IV for further explanation of BMPs.)

Mitigation Measure BIO-1f: The minimum width possible shall be maintained for the crossing of the Central Swale by the Emergency Vehicle Access (EVA) road.

Mitigation Measure BIO-1g: Impacts to wetlands for boring of the sanitary sewer line and reclaimed water line shall be avoided if at all possible. Bore and jack methods shall be used wherever feasible. If impacts to wetlands cannot be avoided from the boring for these lines, an equivalent amount of uplands within the North or South Lowlands shall be converted into wetland. The City shall sign off on Corps mitigation plans requiring “no net loss” of wetlands (affected wetland to wetland mitigation area). A biologist experienced in conducting wetland delineations shall delineate the area of impact. BMPs shall be followed to prevent sedimentation of the wetland in the South Lowlands if there are unforeseen impacts related to boring.

Mitigation Measure BIO-1h: A Wetland Mitigation Plan based on the Conceptual Wetland Mitigation Plan (WRA, 1998b) shall be approved by the Army Corps of Engineers and signed off by the City prior to approval of the Grading Plan. At a

minimum, this Wetland Mitigation Plan shall identify the following goals and objectives; location and size of all areas of fill; location and size of mitigation areas; planting plans and site preparation specifications; an implementation and monitoring plan; the management organization responsible for the plan; and cost estimates sufficient to cover the cost of implementing and maintaining the wetlands. This Plan shall also identify methods of wetland creation and types of wetlands to be created. All mitigation shall occur on-site at a minimum 1:1 ratio; higher mitigation ratios are encouraged. Preferred mitigation areas include conversion of uplands to lowlands in the North and South Lowlands (Note: Uplands are now present within the North and South Lowlands), and removal of fill from railroad crossings to improve wetland connections. Performance standards shall include criteria for evaluating whether goals of the Wetland Mitigation Plan are being achieved over time, plant cover values and the provision that the mitigation wetlands be dominated by native species. Cocklebur (*Xanthium strumarium*), spiny clotbur (*Xanthium spinosum*), broad-leaved pepper-grass (*Lepidium latifolium*), and any other noxious weed shall not comprise more than ten percent relative cover of the mitigation wetlands. The Wetland Mitigation Plan shall include monitoring for five years.

**Mitigation Measure BIO-1i: The impact to wetlands from the access road to the wastewater treatment ponds shall be minimized. The impact could vary between 0 and 4,800 square feet. Bridges, as opposed to culverts, shall be used across any watercourses and fill of adjacent wetlands shall be minimized by use of retaining walls or other means. The area of affected wetland shall be replaced according to the *Conceptual Wetland Mitigation Plan* prepared by the applicant's consultants.**

Mitigation Measure BIO-2a: Mitigation Measure HYDRO-2 discussed in the Hydrology section of Chapter IV, shall be implemented to mitigate impacts from pollutants (pesticides, fertilizers, etc.) and sediment. Because the water quality impacts to receiving waters cannot be guaranteed to be less than significant after mitigation, this impact would remain potentially significant.

Mitigation Measure BIO-2b: A 100+ foot wide buffer shall be maintained between the edge of golf course landscaping (including any golf course path), and South Lowlands wetland areas for at least 90 percent of the length of the golf course. For 10 percent of this length, reductions may be approved by CDFG in exchange for added landscaping or other enhancements, but in no case shall the buffer be less than 50 feet. The buffer shall be a component of the site's natural open space and shall be designed to function as wildlife habitat; people shall be excluded from the buffer area.

The buffer shall be planted with trees and shrubs to screen people from the wetlands and to provide cover for wildlife escaping the Lowlands areas during flooding. Suitable trees would include those native trees already growing on the Stanly Ranch.



These species include coast live oak, black oak, valley oak, black walnut, and California buckeye. Suitable shrubs include snowberry (*Symphoricarpus albus*) (if beneath the tree canopy), California rose (*Rosa californica*), California lilac (*Ceanothus thrysiflorus*), coffeeberry (*Rhamnus californica*), coyote brush (*Baccharis pilularis*), red berry (*Rhamnus crocea*), toyon (*Heteromeles arbutifolia*), California blackberry (*Rubus ursinus*), and Eastwood's manzanita (*Arctostaphylos glandulosa*). Herbaceous species, such as fathen, shall be planted at the margin of the wetland to further increase the cover of the vegetation and increase the effectiveness of the vegetational screen for wildlife (especially salt marsh harvest mice).

Mitigation Measure BIO-2c: Paths to and from golf course holes 11 and 13 shall be developed and fenced to maintain the greatest buffer width possible, but no less than 100 feet wide, between wetlands and the golf course. Signs shall explain the sensitive nature of the wetlands, the importance of the buffer, and the role of buffer plantings.

Mitigation Measure BIO-2d: The proposed Project River Trail Northerly Loops (Loops 1N and 2N) shall be located inland from the edge of the levee approximately 100 feet where possible in order to permit and provide a buffer between people (and potentially their pets) and the wildlife of the wetlands/river.

Mitigation Measure BIO-2e: The Project River Trail shall provide native landscape buffers wherever possible to reduce impacts of human intrusion on wildlife habitat. Such landscaping shall be included in the final Wetland Mitigation Plan and incorporated into the final design. Buffer plants shall be selected from the list in Mitigation Measure BIO-2b above or similar appropriate native species matched with proper site and planting conditions.

Mitigation Measure BIO-2f: In an appropriate location or locations, signs shall explain the sensitive nature of wetlands, the importance of staying on the designated trail or golf cart path, and the role of buffer plantings.

Mitigation Measure BIO-2g: Project River Trail operating rules shall prohibit dogs or require that dogs be kept on a leash.

Mitigation Measure BIO-2h: Mitigation Measure HYDRO-2 shall be implemented to reduce trail construction sedimentation impacts.

Mitigation Measure BIO-2i: Dense riparian plantings shall be established on the banks of the drainages that cross the panhandle and the proposed vineyard on the east side of the highway. These plantings shall occur in two bands, each band on either side of each drainage. These bands shall be 50-feet wide beginning from the top of each bank. The species listed in the *Riparian Enhancement Plan for Stanly*



*Ranch, Napa, California* are suitable for planting along these drainages. Planting shall stop where the salinity of the soil of the North Lowlands hinders growth.

Mitigation Measure BIO-3a: Three native trees shall be planted for every native tree removed due to widening of Stanly Lane. Replanted trees shall be the same species as each tree that is removed. Planting of these trees shall occur along the drainages crossed by Stanly Lane in the panhandle. Coordination shall occur between implementing this mitigation measure and Mitigation Measure BIO-2b.

Mitigation Measure BIO-3b: The applicant shall implement the tree replanting plan, including tree rows along both sides of Stanly Lane and Old Suscol Road. Mitigation Measures BIO-2i, BIO-4, and BIO-11 shall also be implemented to partially mitigate loss of raptor perching, foraging and nesting habitat.

Mitigation Measure BIO-4: From February through July, a pre-construction survey shall be conducted for nesting raptors within 30 days of construction to determine if raptors are nesting in trees slated for removal. Buffers 100 feet wide shall be established around each active nest encountered during the pre-construction survey. These buffers shall be maintained until the young have fledged.

Mitigation Measure BIO-5: An equivalent amount of California oatgrass grassland shall be established on the project site to mitigate for the stand removed by the project. The North Lowlands appears to provide suitable soils and hydrology for California oatgrass. Candidate mitigation areas shall not be dominated by native plant species because removal of native plant habitat could constitute a significant impact.

Mitigation Measure BIO-6a: Prior to construction of any trail or repair of any portion of the levee along the Napa River, surveys shall be carried out for Mason's lilaeopsis. Site conditions (area of stand, number of plants, plant cover, associated species, topography, tidal regime, etc.) shall be documented for each of the stands of Mason's lilaeopsis encountered. Construction shall avoid impacts to stands of Mason's lilaeopsis. These stands shall be fenced and the fenced areas noted on project grading plans as areas to be protected. Any stands of Mason's lilaeopsis adversely affected or destroyed by construction shall be replaced. A plan to replace the stand(s) shall be developed in consultation with and approved by the California Department of Fish and Game (CDFG).

Mitigation Measure BIO-6b: Any soils from project construction shall not be pushed onto stands of Mason's lilaeopsis. Contractors shall be made aware of this condition by way of established construction standards.

Mitigation Measure BIO-6c: The proposed Project River Trail Northerly Loop 1N and Future Southerly Loop shall be located inland from the edge of the levee

approximately 100 feet where possible in order to minimize potential impacts on Mason's lilaeopsis.

Mitigation Measure BIO-7a: Prior to construction of any trail or repair of any portion of the levee along the Napa River, surveys shall be carried out for nesting salt marsh common yellowthroats. Construction shall avoid impacts to nests of salt marsh common yellowthroats. These nests shall be fenced and a 100-foot buffer established around the nest location. The nest(s) shall be noted on project grading plans.

Mitigation Measure BIO-7b: Any soils from project construction shall not be pushed into areas supporting nests of salt marsh common yellowthroats. Contractors shall be made aware of this condition by way of established construction standards.

Mitigation Measure BIO-8a: Prior to construction of any trail or repair of any portion of the levee along the Napa River, consultation shall occur with CDFG, National Marine Fisheries Service, USFWS, and the Corps. Measures to minimize impacts to the Napa River adjacent to wetlands and to limit the generation of silt shall be instituted as described in mitigation measures for Impacts BIO-1, BIO-2 and HYDRO-2.

Mitigation Measure BIO-8b: Best Management Practices (BMPs) shall be implemented to reduce the amount of silt produced. Because the water quality impacts to receiving waters and the fish cannot be guaranteed to be less than significant after mitigation, this impact would remain potentially significant.

Mitigation Measure BIO-9a: Prior to construction of any trail or repair of any portion of the levee along the Napa River, consultation shall occur with CDFG, National Marine Fisheries Service, USFWS, and the Corps. Measures to minimize impacts to wetlands and to limit the generation of silt shall be instituted as described in mitigation measures for Impacts BIO-1, BIO-2 and HYDRO-2.

Mitigation Measure BIO-9b: BMPs shall be implemented to reduce the amount of silt produced. The applicant shall avoid disturbance to the water of the Napa River and shall time construction to avoid impacts during spawning.

Mitigation Measure BIO-10a: Mitigation Measure BIO-2b shall be implemented. The required buffer shall provide sufficient cover to hide salt marsh harvest mice especially when their habitat is flooded for a month or more during the winter.

Mitigation Measure BIO-10b: The Future Southerly Loop trail alignment shall be revised in the southwestern corner of the railroad bed to trend northwesterly around existing wetlands, then back south at the west edge of the property line to provide a minimum 100-foot buffer distance to salt marsh harvest mouse habitat. This would

necessitate a minor revision to proposed lots in Neighborhood 4 and minor wetland fill at the western edge of the property to reconnect this future trail back to the railroad bed.

Mitigation Measure BIO-10c: No temporary staging areas, stockpiling of equipment or construction materials, placement of any dredge or fill material, or artificial lighting, shall occur in or impinge upon the South Lowlands wetland areas unless approved by the USFWS.

Mitigation Measure BIO-10d: A predator management plan shall be prepared by the project applicant, which shall include, but not be limited to, adequate funding for U.S. Department of Agriculture Wildlife Service personnel to conduct predator management.

Mitigation Measure BIO-10e: A plan shall be implemented, in coordination with the USFWS, to restrict public access (e.g. use of fences, barriers, landscaping, and signs) to the maximum extent feasible in the South Lowlands. The plan shall incorporate the Project River Trail alignment. The plan must be reviewed and approved by USFWS prior to initial project occupancy.

Mitigation Measure BIO-10f: The following activities shall be prohibited in the South Lowland wetland areas: 1) alteration of existing topography except for the minimum needed for levee maintenance or implementation of a wetland restoration plan approved by the USFWS; 2) placement of any new project-related structure unless approved by the USFWS; 3) dumping or burning of any garbage, waste, or fill material unless approved by the USFWS; 4) killing, removing, alteration, or replacement of any existing native vegetation unless approved by the USFWS; and 5) use of any pesticides or herbicides unless approved by the USFWS.

Mitigation Measure BIO-10g: Habitat of the salt marsh harvest mouse shall be improved by increasing the drainage from the South Lowlands. This increased drainage shall occur by adding culverts that would drain the South Lowlands area. The culverts shall have flap gates that would prevent water from entering the South Lowlands from the Napa River.

Mitigation Measure BIO-11: Pre-construction surveys shall be conducted within a period of 30 days prior to construction to determine if these species have colonized the site. Surveys for western burrowing owls shall follow CDFG burrowing owl survey protocol. If construction is proposed during the breeding season and these species occupy the site, a buffer 200-feet wide shall be established around nests for northern harrier and short-eared owl, and buffers 100 feet wide around nests for western burrowing owl and California horned lark.



Mitigation Measure BIO-12: Pre-construction surveys shall be conducted within 30 days prior to removal of any existing buildings to determine if any special status bat species have colonized the site. If construction is proposed during the breeding season, and breeding colonies have colonized the site, the habitat of the breeding colonies shall not be destroyed during the time that the bats are present. After the young are independent and the colony is no longer using the buildings, the buildings can be removed.

Mitigation Measure BIO-13: Corridors shall be planted across the site to allow the movement of wildlife from the Napa River to upland areas beyond the Stanly Ranch site. Upland corridor plantings shall occur along the project site border at Neighborhood 4 and extend along the border to the Bay Trail. These plantings shall be at least 15 to 50 feet wide. Other wildlife corridors include the drainageways described in BIO-2i where planted areas along the drainages shall average 50 feet on each side.

## **7. Historic and Cultural Resources**

Mitigation Measure HIS-1a: A project archaeologist shall be hired for the construction phase of the project. A plan for further necessary evaluation shall be developed by the project archaeologist after review of construction plans which clearly outlines potential impacts to these resources. Mechanical trenching shall be undertaken in areas of former structures and in or around the locations of existing structures after their removal to locate actual historical material deposits or architectural features. Through this process, the presence or absence of related deposits can be demonstrated, and where located, the aerial extent and depth of the deposit mapped.

Mitigation Measure HIS-1b: In those cases where deposits or other forms of historical information are located and where project-related impacts would unavoidably occur, evaluative testing of the deposits shall be undertaken to identify resources and demonstrate significance. This testing can take the form of a combination of mechanical soil removal and hand excavation. Following completion of this identification and evaluation phase, full recording of all cultural resources shall be conducted. Mitigation of impacts to a less-than-significant level would depend upon a number of factors including a determination of whether the resource qualified as "historical" under CEQA. If any archaeological materials or objects are unearthed during project construction, all work in the vicinity shall be immediately halted until a qualified archaeologist is retained to evaluate the finds. The developer shall comply with all mitigation recommendations of the archaeologist prior to commencing work in the vicinity of the archaeological finds.



Mitigation Measure HIS-1c: If subsurface prehistoric or historic deposits containing human remains are discovered during earth moving activities, the find shall be considered significant and shall be reported to the County Coroner. All work in the vicinity shall immediately halt until a qualified archaeologist is retained to evaluate the finds. Responsibility for human remains discovered during project activities comes under the jurisdiction of the County Coroner and disposition is governed by the provisions of Section 5097.94 and 5097.98 of the Public Resources Code. If the remains are Native American, the Coroner is responsible for contacting the Native American Heritage Commission (NAHC). The developer shall comply with all mitigation recommendations of the archaeologist prior to commencing work in the vicinity of the archaeological finds.

This impact would remain potentially significant because if any archaeological remains qualify as historic resources, recordation accompanied by destruction of the resource would not constitute mitigation.

Mitigation Measure HIS-2a: The Stanly House shall be rehabilitated and occupied in its historic location, rather than being demolished and replaced with a new building. Rehabilitation of the building would be consistent with *The Secretary of Interior Standards for Rehabilitation and Guidelines for Rehabilitation of Historic Buildings* published by the U.S. Department of Interior (1992). This mitigation measure would reduce the impact to a less-than-significant level.

Mitigation Measure HIS-2b: If Mitigation Measure HIS-2a above is not implemented, the Stanly House shall be moved to a different location on the Stanly Ranch, and the building rehabilitated according to *The Secretary of Interior Standards for Rehabilitation and Guidelines for Rehabilitation of Historic Buildings*. If the building is moved from its original location, the new location must be appropriate to the historic character of the building. The project sponsor shall guarantee the building will be rehabilitated and occupied, and thus it will not be abandoned and allowed to deteriorate further in its new location. This mitigation measure would reduce project impacts to a less-than-significant level.

The feasibility of moving the Stanly House has not been determined, and is beyond of the scope of this analysis. The feasibility of moving the building can only be determined by a contractor or engineer experienced in moving historic buildings. Although a wood-frame building like the Stanly House can usually be moved without difficulty, the house's structural condition needs to be evaluated to determine if the house can be moved and not significantly damaged.

The following mitigation measures, alone or in combination, would not mitigate this impact to a less-than-significant level. However, they would help to reduce the impact if the Stanly House is not rehabilitated and retained on the Stanly Ranch. If the Stanly House is moved intact from the Stanly Ranch (Mitigation Measure HIS-

2c), the salvage activities described in Mitigation Measure HIS-2e would not be necessary.

Mitigation Measure HIS-2c: If Mitigation Measures HIS-2a and HIS-2b are not implemented, the Stanly House shall be moved to a location not on the Stanly Ranch, and the building rehabilitated according to *The Secretary of Interior Standards for Rehabilitation and Guidelines for Rehabilitation of Historic Buildings*. If the building is moved from its original location, the new location must be appropriate to the historic character of the building. The project sponsor shall guarantee the building will be rehabilitated and occupied, and thus it will not be abandoned and allowed to deteriorate further in its new location. Because the Stanly House possesses significant associations with the history of the Stanly Ranch and with John Stanly, a person significant in local history, moving the house to a site off the Stanly Ranch would not reduce project impacts to a less-than-significant level.

Mitigation Measure HIS-2d: Prior to demolishing, salvaging or moving the Stanly House off the Stanly Ranch, the building shall be documented according to the Outline Format described in the *Photographic Specifications* and *The Guidelines for Preparing Written and Descriptive Data: Historic American Building Survey* (HABS) published by the Pacific West Region Office (in San Francisco) of the National Park Service. This documentation shall include archival quality, large format (minimum 4 by 5 inch) photographs of the exterior and interior of the building. Sketch floor plans shall also be included as part of the HABS documentation. A copy of the documentation, with original photo negatives and prints, shall be donated to an historical archive accessible to the public, such as the Napa County Historical Society, or other suitable local history collection. The HABS documentation of the Stanly House would reduce project impacts, but not to a less-than-significant level.

Mitigation Measure HIS-2e: The preservation of architecturally distinguished or historically significant features of the Stanly House (fireplaces, wall brackets, etc), and the incorporation of these features into the design of a new building proposed for the Stanly Ranch, would reduce project impacts. Salvaging these features in a building not on this parcel (such as in a museum display or in another historic building) would reduce project impacts. However, it would be preferable to have the features preserved in the historic location. If the building is to be demolished, representatives of the Napa County Historical Society, Napa County Landmarks and the Napa Cultural Heritage Commission, and other interested parties shall be contacted and given the opportunity to examine the building and provide suggestions for salvaging these elements in other buildings.

Project impacts would be reduced commensurate with the percentage of the existing building that can be reused or otherwise preserved. The preservation of one or more of the significant interior and exterior features from the existing building as part of a

new building would reduce project impacts, but not to a less-than-significant level since the Stanly House would be largely demolished. The preferred alternative from the standpoint of historic values would be to preserve as much of the original building as possible on its historic site.

Mitigation Measure HIS-2f: An exhibit on the history of the Stanly Ranch could be included in one of the new buildings constructed under the *Draft SRSP*. The material assembled for the HABS documentation (see Mitigation Measure HIS-2d) of the Stanly Ranch could be used in such an exhibit. The exhibit shall reduce the project impacts, but not to a less-than-significant level. Combined with Mitigation Measures HIS-2c, HIS-2d, and HIS-2e above, this mitigation measure would further reduce the impacts of the project.

Mitigation Measure HIS-3a: The blue gum eucalyptus along Stanly Lane and Old Suscol Road shall be replaced with a similar species of eucalyptus. Given that over 600 species of eucalyptus exist, an historical horticulturist shall be consulted to evaluate the feasibility of replacing the blue gum eucalyptus with a similar species of eucalyptus. National Register Bulletin 30 – *Guidelines for Evaluating and Documenting Rural Historic Landscapes* – recognizes that the issue of the historic integrity of vegetation in an historic landscape “presents a complex problem” (see U.S. Department of Interior 1990:22-23). Since “plants do not remain static but change over time,” *Bulletin 30* indicates that while “original plant material may enhance integrity, *their loss does not necessarily destroy it*” (emphasis added). Consequently, *Bulletin 30* states that if the historic landscape retains “vegetation similar to the historic species in scale, type, and visual effect,” the landscape “can retain integrity of setting.” Although only about 300 trees planted in the 19th century survive, the overall form and feeling of this landscape feature retains integrity because subsequent plantings have maintained the eucalyptus windrows. Consequently, replacing the existing eucalyptus with the same or similar species would retain the historic integrity of this landscape feature. This mitigation measure would reduce project impacts to a less-than-significant level.

The following mitigation measures, which can be adopted alone or in combination, would not reduce the impact to a less-than-significant level but are recommended in the event that Mitigation Measure HIS-3a is not implemented. If any of the mitigation measures below are selected without Mitigation Measure HIS-3a, the impact would remain significant.

Mitigation Measure HIS-3b: The blue gum eucalyptus along Stanly Lane and Old Suscol Road could be replaced with a non-eucalyptus tree species, but a tall, vertical tree with dense, green foliage like the eucalyptus should be selected. A tree species used during the 19th century for windrows would not be appropriate since it would create a false sense of historic development. The *Secretary of Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving*,



*Rehabilitating, Restoring and Reconstructing Historic Buildings* (1995) (hereinafter referred to as *The Standards*) discourage creating a false sense of historic development in restoring historic buildings and landscapes. In regards to restoring historic landscapes, guidelines discouraging creating a false sense of historic development have been further elaborated in the recently published *Secretary of Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes* (1996). The Proposed CEQA Guidelines (Section 15064.5) indicate that a project consistent with the Standards will mitigate significant impacts. This mitigation measure would reduce project impacts somewhat, but not to a less-than-significant level.

Mitigation Measure HIS-3c: Before large numbers of trees are removed, Stanly Lane and Old Suscol Road shall be photographically documented according to the *National Register Bulletin 30 - Guidelines for Evaluating and Documenting Rural Historic Landscapes* and the *Photographic Guidelines* for the Historic American Building Survey. The documentation shall include archival quality, large format (minimum 4 by 5 inch) photographs of a variety of views of the two roads. Maps and aerials of the roads shall also be included as part of the documentation. A copy of the documentation, with original photo negatives and prints, shall be donated to an historical archive accessible to the public, such as the Napa County Historical Society, or other suitable local history collection. By itself, the historic documentation of Stanly Lane and Old Suscol Road would not reduce project impacts to a less-than-significant level. Combined with Mitigation Measure HIS-3b, this Mitigation Measure would further reduce the impacts of the project.

Mitigation Measure HIS-3d: The applicant shall include an exhibit on the history of the Stanly Ranch in one of the new buildings constructed on site as referred to in Mitigation Measure HIS-2f. This mitigation measure can be combined with Mitigation Measures HIS-3b and HIS-3c above to further reduce the impacts of the project.

Mitigation Measure HIS-4a: Prior to demolishing or salvaging parts of the cistern, it shall be documented according to the Outline Format described in the Guidelines for the Historic American Building Survey (HABS) published by the Western Regional Office of the National Park Service. This documentation shall include archival quality, large format (minimum 4 by 5 inch) photographs of the exterior and interior of the building. A sketch plan will also be included as part of the HABS documentation. A copy of the documentation, with original photo negatives and prints, should be donated to an historical archive accessible to the public, like the Napa County Historical Society, or other suitable local history collection.

Mitigation Measure HIS-4b: The applicant shall preserve any features or materials of historic interest in the cistern. Salvaging these features in a building not on the Stanly Ranch (such as in a museum display or in another historic building) would



reduce project impacts less than having the features preserved in their historic location. If the cistern is to be demolished, the applicant shall contact representatives of the Napa County Historical Society, Napa County Landmarks and the Napa Cultural Heritage Commission, and other interested parties. The representatives of these groups shall have an opportunity to examine the cistern and provide suggestions for salvaging elements.

Mitigation Measure HIS-4c: The applicant shall include an exhibit on the history of the Stanly Ranch in one of new buildings constructed on site as referred to in Mitigation Measure HIS-2f. This mitigation measure can be combined with Mitigation Measures HIS-4a and HIS-4b above to further reduce the impacts of the project.

The above mitigation measures would reduce project impacts, but any action other than preserving the cistern in its current location would result in a potentially significant impact. Such preservation cannot be guaranteed at this time.

## **8. Visual Quality**

Mitigation Measure VIS-1: This impact would remain significant and unavoidable. However, it is noted that many of the following visual mitigation measures would reduce the effects of this impact.

Mitigation Measure VIS-2: To bring the project into consistency with existing General Plan Open Space Policy C2, the applicant shall implement Mitigation Measure POL-1h which requires elimination of the easternmost six townhomes and the proposed easternmost row of homes on Home Hill (Neighborhood 2) from the northern subdivision edge to the second cul-se-sac/circle, and replanting of this area with a new tree grove comprised of native and ornamental species of sufficient height and width to screen two-story homes within five years of planting.

Mitigation Measure VIS-3a: To provide screening of Home Hill residences from northbound SR 29, the applicant shall implement Mitigation Measure VIS-2.

Mitigation Measure VIS-3b: To recreate the scenic "greenway" corridor along SR 29 and provide screening of the site, the *Draft SRSP* shall be revised prior to adoption to incorporate the proposed Windrow Replacement and Management Plan (EDAW Inc., et al., 1998) and the applicant shall implement tree plantings as early as possible in Phase 1 of the project.

Mitigation Measure VIS-3c: Additional tree plantings shall be added southeast of the golf clubhouse, resort lodge, nearest guest cottages to the east, and spa to provide long-term screening of these buildings from view from SR 29/12. New trees shall also be added at the northeast end of Neighborhood 1 to better screen it from view

for northbound motorists on SR 29/12. Plantings shall be consistent with those recommended in the replanting plan for these locations.

Mitigation Measure VIS-3d: The applicant shall secure an encroachment permit from Caltrans and, as soon as possible following approval of the *Draft SRSP*, plant additional trees within the wide Caltrans right-of-way in the areas described below to maximize screening of proposed resort and residential areas from the view of southbound motorists. Tree plantings close to the travel lanes would be particularly helpful south of the central swale in screening the employee housing area and golf maintenance yard, and to better screen homes in Neighborhood 1. North of the central swale, added trees planted east of the retained eucalyptus would add to the screening of the resort area.

Mitigation Measure VIS-3e: Final design plans for the winery and wine center shall: 1) include additional tree plantings on the north and east sides of the wine center and winery; and 2) shall provide equal attention to design of all facades to provide an exceptional design.

Mitigation Measure VIS-3f: Prior to adoption, the *Draft SRSP* shall be revised to include specific measures regarding design review as described in Mitigation Measure VIS-4.

Mitigation Measure VIS-3g: All new utilities proposed as a result of the proposed project shall be undergrounded.

Mitigation Measure VIS-4: The City shall ensure that the *Design Guidelines* of the *Draft SRSP* and visual mitigation measures or conditions of approval are implemented prior to the issuance of building permits. To ensure compliance given the sensitivity of this project, the Planning Commission shall be responsible for design review prior to issuance of building permits for major project components: the highly visible winery and wine center, the resort lodge, golf clubhouse, golf maintenance facility and major parking lots, initial residential subdivisions and initial resort unit designs, and the employee housing complex. The applicant shall secure separate architectural review approval for any signage for the project.

## **9. Population, Employment, and Housing**

No mitigation measures.

## **10. Public Services**

Mitigation Measure SER-1a: Consistent with the NPD Police Chief's recommendations, no gate shall be placed at the greeting station at the intersection of Old Suscol Road and Stanly Lane. Alternatively, if a gate is ever proposed, it shall

be manned. Security gates may be considered at the entrance of private roads branching off of Old Suscol Road. The applicant may desire to construct a gate at the northern entrance to the resort homes.

Mitigation Measure SER-1b: The Stanly Ranch project shall be patrolled by high quality, on-site, around-the-clock security to meet the recommendations of the NPD.

Mitigation Measure SER-1c: The Declaration of Establishment of Conditions and Restrictions (CC&R's) shall include the ability for private security to levee fines to enforce parking and speeding problems because on-site streets would be private.

Mitigation Measure SER-2a: The project applicant shall pay for the construction of a new fire station to serve the project either on-site or on City-owned property north of the project site. This payment would offset any obligation for payment of Fire and Paramedic Development fees for fire station construction elsewhere in the City.

Mitigation Measure SER-2b: The project applicant shall ensure adequate access to the site for emergency and fire vehicles in accordance with the Napa City Fire Code and standards and Public Works Department standards. This access shall be clearly identified as part of the tentative subdivision maps.

Mitigation Measure SER-2c: The applicant shall comply with all applicable requirements of the Uniform Fire Code, the Fire Department and PWD Standard Specifications and the Fire Department "Standard Requirements for Commercial/Residential Projects," including, without limitation, the requirements for access, new construction, smoke detectors, etc. Existing fire hydrants may be used to meet hydrant location requirements only if they meet or are changed to meet current hydrant specifications.

Mitigation Measure SER-2d: Properties having common ownership shall provide the Fire Department with a notarized copy of the recorded CC&R's in a form satisfactory to the City Attorney ensuring that all components of fire protection system(s) and fire access roads will be maintained by a maintenance district, owner's association, or similar legally-responsible entity.

Mitigation Measure SER-2e: All newly constructed buildings shall have automatic sprinkler systems conforming to NFPA and City Standard Specifications, for which an installation permit must be obtained from Fire Prevention. In multi-unit complexes, or in buildings with three or more stories, special monitoring conditions shall be required. Existing habitable buildings which are retained shall be retrofitted.



Mitigation Measure SER-2f: The applicant of any project proposing a change in occupancy use classification (as defined in the UBC Table 5A) in a building protected by automatic fire sprinklers shall have the sprinkler system evaluated by a licensed fire sprinkler contractor or fire protection engineer for compliance with National Fire Protection Association Installation Standards. A written report of the inspection findings shall be submitted to the Fire Department prior to final occupancy clearance. A permit is required from Fire Prevention for sprinkler system alterations.

Mitigation Measure SER-2g: The developer for any project which proposes commercial occupancies shall secure approval from Fire Prevention and Building Departments prior to signing lease agreements and allowing occupancy of prospective occupants that pose possible fire and life safety hazards or are classified by the UBC as an H (Hazardous) occupancy.

Mitigation Measure SER-3a: The Stanly Ranch shall assist the City in meeting adopted parks and recreation policies and standards through dedication and construction of the Bay Trail and the River Trail Northerly Loops, and dedication of the Southerly Loop.

Mitigation Measure SER-3b: Developer shall pay the required fees for each new dwelling unit in accordance with Napa Municipal Code (NMC) 15.68. Such fee shall be payable at the rate in effect at the time of payment for the unit involved. The findings set forth in such chapter and Resolution 92-084 are incorporated herein. The City further finds that calculation of the fee due pursuant to the formula set forth in NMC Section 15.68.040 demonstrates there is a reasonable relationship between the fees imposed and cost of the improvements attributable to this project.

Mitigation Measure SER-3c: Unless project approval requires only land dedication, the Developer shall pay the required fees for each new dwelling unit in accordance with and for the purposes of NMC Sections 16.32.040, NMC 15.68.010 and 15.68.090 for each residential unit authorized or allowed by project approval. Such fee(s) shall be payable at the rate in effect at the time of payment for the unit involved. The findings set forth in such chapter and Resolution 92-084 are incorporated herein. The City further finds that calculation of the fee due pursuant to the formula set forth in NMC Section 15.68.040D demonstrates there is a reasonable relationship between the fees imposed and cost of the improvements attributable to this project.

## **11. Public Utilities**

Mitigation Measure UTIL-1: The following combination of mitigation measures shall be implemented:



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- (a) Policy 1.9 of the *Draft SRSP* shall be revised, prior to adoption of the *Final SRSP*, to require the use of reclaimed water for irrigation of the neighborhood parks, resort open space, golf course, wine center open space, major street landscaping, fire station landscaping, vineyards and landscape buffers, and storm drain treatment ponds.
- (b) In accordance with the *Draft General Plan*, Community Service Element Policy CS-9.3, the applicant shall obtain an "approval letter" from the City of Napa Department of Public Works prior to obtaining a building permit, final subdivision map, or similar ministerial entitlements, stating that the project would not adversely affect the City's ability to adequately serve the public health and safety needs of all of its water customers during drought conditions and that there will be sufficient water to serve the basic health, hygiene and fire suppression needs of the community. The City shall issue the letter(s) of approval only for those portions of the proposed project for which the City can guarantee water supply specifically during drought conditions.
- (c) The Implementation Program for the *Draft SRSP* shall be amended to include the requirements for obtaining an approval letter for water supply from the City of Napa Department of Public Works.
- (d) Water Policy 1.8 of the *Draft SRSP* shall be revised, prior to adoption, to require the implementation of water conservation measures (versus support of water conservation measures). The projected average daily potable water demand, as shown in existing Table 9 of the *Draft SRSP*, shall be revised to reflect the implementation of water conservation measures. In addition, the Implementation Program of the *Draft SRSP* shall be revised to include a Water Conservation Program which shall discuss methods for implementing water conservation measures to comply with Policy 1.8 of the *Draft SRSP*. Water conservation measures shall include the use of water saving devices (e.g., toilets, shower heads, and appliances) in all new construction; at a minimum, all faucets in sinks and lavatories shall be equipped with faucet aerators designed to limit the maximum flow to 2.2 gallons per minute (gpm); all shower heads shall be designed to limit the maximum flow to 2.5 gpm.

Water conservation measures shall also include installation of drought tolerant landscaping in accordance with the California Water Conservation and Landscaping Act. The applicant shall submit to and receive approval from the Planning Department of a Landscape and Irrigation Plan designed and signed by a licensed landscape architect or landscape contractor prior to the issuance of a building permit for the nonresidential lots, or approval of a final or parcel map. The Plan shall conform to the City of Napa's Water Efficient Landscape Guidelines.

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- (e) Policy 1.8 of the *Draft SRSP* shall also be revised prior to adoption to require the retrofit of existing homes within the City of Napa, as proposed by the applicant. The projected average daily potable water demand, as shown in existing Table 9 of the *Draft SRSP*, shall be revised to reflect the projected water savings from implementation of the revised Policy 1.8 of the *Draft SRSP*.
- (f) The Implementation Program shall also be revised prior to adoption of the *Final SRSP* to describe how the project would implement and comply with the above-mentioned policy. The Program shall include requirements to: 1) perform at least the minimum number of retrofits specified by the City Water Department, pursuant to the City's Retrofit Program for New Development; 2) perform additional voluntary retrofits necessary to prevent an increase to the City's average daily potable water demand (ADPWD); and 3) monitor the implementation of retrofits prior to occupancy of new buildings to ensure that the potable water demand from the City of Napa water system (e.g., demand beyond existing water use on the property) would be completely offset through implementation of (d) and (e) above.
- (g) In addition to the above water mitigation measures, the following standard City mitigation measures shall apply:
1. The applicant shall:
    - Install or execute the City's Installation Agreement, including appropriate security, for the landscaping and irrigation.
    - Prior to initial occupancy and the release of installation security, the licensed professional who signed the final landscape and irrigation plans shall certify in writing that he or she has inspected and approved the installation of the landscaping and irrigation and found them to be consistent with the approved plan and that the systems are in working order.
    - Prior to occupancy, the applicant shall execute and record the City's Landscape Maintenance Agreement.
  2. The project shall connect to the City of Napa water system. Any existing well must be properly protected from potential contamination. If an existing well is to be destroyed, a well destruction permit must be obtained from the Napa County Department of Environmental Management by a licensed well driller. If an existing well is not destroyed, it must be properly protected and an approved backflow prevention device installed according to the Water Division's specifications.
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3. Prior to trenching within existing roadway areas, the Developer's engineer shall ascertain the location of all underground utility systems and shall design any proposed subsurface utility extensions to avoid disrupting the services of such systems.

Mitigation Measure UTIL-2:<sup>1</sup> The following six-part mitigation measure (a through f) shall be implemented:

- (a) The discussion about sanitary sewers in the *Draft SRSP* shall be corrected to acknowledge that the NSD facility currently does not have the capacity to accept additional wastewater generated from new development.
- (b) Revised Policy 1.8 addressed in Mitigation Measure UTIL-1(d) and (e), shall also state that the project shall retrofit existing homes with water-saving devices to assure there is no net increase in wastewater loading to the NSD facility. The estimated average daily sewer flows, as shown in existing Table 8 of the *Draft SRSP*, shall be revised to reflect the projected wastewater flow reduction from implementation of Mitigation Measure UTIL-1(d) and (e).

The Implementation Program shall also be revised prior to adoption of the *Final SRSP* to describe how the project would demonstrate the effectiveness of the on-site water saving devices and off-site retrofits (e.g., monitoring the implementation retrofits in relationship with new on-site fixtures installed) to ensure that the project's estimated wastewater generation flow would be completely offset with the implementation of required and voluntary water saving measures described in Mitigation Measure UTIL-1 (d) and (e).

- (c) In addition to the above measures, the following standard City mitigation measure shall apply:
  1. Any needed existing septic systems, setbacks and reserve areas must be protected and maintained during cleaning, grading, construction. After connection to a wastewater treatment system, any existing septic tanks shall be properly destroyed.

Mitigation Measure UTIL-3: Compliance with existing regulatory requirements for treatment and application of reclaimed water would reduce this potential impact to less than significant. However, the Implementation Program of the *Draft SRSP* shall describe how the regulatory requirements would be satisfied prior to adoption of the *Final SRSP*.

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<sup>1</sup> The proposed project's Mitigation Measures UTIL-2a, UTIL-2b and UTIL-2c were removed for the On-site Wastewater System Alternative.



Mitigation Measure UTIL-4: The project applicant shall work with PG&E to develop the site in a manner which allows for safe and efficient operation and future maintenance of gas and electric facilities. Compliance with PG&E's recommendations shall be verified prior to approval of tentative subdivision maps.

## 12. Noise

Mitigation Measure NOI-1a: Homes within Neighborhood 1 shall be sited to include useable yard space on the south side of buildings to shield this space from highway noise. Alternatively, the feasibility of using fencing to shield outdoor areas shall be evaluated based on topography. Noise levels in the outdoor use areas associated with the employee housing shall be mitigated by orienting the homes such that the buildings themselves shield the outdoor use area. If the employee housing area, as shown in Figure III-13, is rotated so that the parking lot is parallel to SR 29/12 and the patios face the parking lot, noise levels in most of the yards would be reduced to 60 dB or less. In some of the yards, noise levels may exceed 60 dB and be as high as 63 dB, but these noise levels would be consistent with the intent of the both the current and Draft Noise Elements of the City's *General Plan*.

Mitigation Measure NOI-1b: Homes within the 60-63 dB  $L_{dn}$  contour shall be required to provide mechanical ventilation to assure that interior noise standards are met.

Mitigation Measure NOI-2: Bedroom windows in homes within 1,300 feet of a wind machine shall have an STC (Sound Transmission Class) rating approximately 10 decibels higher than standard windows (i.e., an STC rating of 40). Installation of such windows would provide for acceptable noise levels indoors with the windows closed, even during wind machine use not in excess of sleep disturbance levels.

Mitigation Measure NOI-3: The following combination of measures shall be required for project construction:

- Construction activities shall be limited pursuant to Napa Municipal Code (NMC) 8.08.025 to 7 AM to 7 PM, Monday through Friday and 8 AM to 4 PM on weekends or legal holidays, unless a permit is first secured from the City Manager (or his/her designee) for additional hours. The ordinance further states that there will be: no start up of machines nor equipment prior to 8 AM, Monday through Friday; no delivery of materials nor equipment prior to 7:30 AM nor past 5 PM Monday through Friday; no cleaning cleaning of machines nor equipment past 6 PM, Monday through Friday; no servicing of equipment past 6:45 PM Monday through Friday.
- All internal combustion engines for construction equipment used on the site shall have state-of-the-art muffler systems required by current law and be properly maintained.



- Unnecessary idling of internal combustion engines shall be strictly prohibited. Grading and construction equipment shall be shut down when not in use.
- All stationary noise-generating construction equipment, such as air compressors and portable power generators, shall be located as far as practical from existing residences and businesses and provided with acoustical shielding if necessary.
- Residential neighbors adjacent to the project shall be notified of the construction schedule in writing.
- A noise disturbance coordinator, responsible for responding to complaints about construction noise, shall be designated by the project contractor. The telephone number for the disturbance coordinator shall be posted at the construction site and shall also be included in the notice sent to neighbors regarding the construction schedule.

Mitigation Measure NOI-4: During the final design phase of the road and Bay Trail, the applicant shall incorporate five-foot high solid fencing or berming to help shield yards, patios or other primary outdoor use areas associated with the existing home.

### **13. Air Quality**

Mitigation Measure AIR-1: The BAAQMD has prepared a list of feasible construction dust control measures that can reduce construction impacts to levels that are less than significant. The following construction practices shall be required during all phases of construction within the project site:

- Water all active construction areas at least twice daily.
- Water or cover stockpiles of debris, soil, sand or other materials that can be blown by the wind.
- Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard.
- Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas and staging areas at construction sites.
- Sweep daily (preferably with water sweepers) all paved access roads, parking areas and staging areas at construction sites.
- Sweep streets daily (preferably with water sweepers) if visible soil material is carried onto adjacent public streets.
- Hydroseed or apply non-toxic soil stabilizers to inactive construction areas.
- Enclose, cover, water twice daily or apply non-toxic soil binders to exposed stockpiles (dirt, sand, etc.).
- Limit traffic speeds on unpaved roads to 15 mph.

- Install sandbags or other erosion control measures to prevent silt runoff to public roadways.
- Replant vegetation in disturbed areas as quickly as possible.
- Shut down grading and construction equipment when not in use.

Mitigation Measure AIR-2: The applicant shall be required to implement the Stanly Ranch TDM Plan covering the above measures and any additional measures proposed by the applicant in April 1998. The project would contain some non-automotive emission sources. Although these sources represent only a small fraction of total project emissions, effective control measures to reduce emissions from these sources are available. The following shall be required:

- Use of low emission maintenance equipment and vehicles where feasible.
- Use of natural gas-fired fireplaces rather than wood-burning fireplaces.

Even with the implementation of all mitigation measures, project emissions would exceed the BAAQMD thresholds of significance. Project impacts on regional air quality are considered significant and unavoidable.

#### **14. Public Health and Safety**

Mitigation Measure PHS-1: Prior to demolition activities, an asbestos survey and a lead-based paint survey or screening of all on-site structures proposed for demolition shall be completed to determine if these materials are present, which may require abatement or which would potentially pose a health risk to construction workers during site demolition activities. The asbestos survey shall be completed in accordance with BAAQMD regulations, and shall include the collection and analysis of suspect ACM. If ACM were found to be present, specifications shall be prepared for safe removal and disposal (abatement) of ACM by trained workers, in accordance with applicable federal, state, and local BAAQMD requirements. The lead-based paint survey or screening shall be completed by a qualified environmental professional (e.g., industrial hygienist). If lead-based paint were found to be present, demolition shall be conducted in compliance with the California Construction Lead Standard (Title 8, CCR, Section 1532.1) by trained workers.

Mitigation Measure PHS-2: An inventory of the interior areas of all on-site structures shall be completed prior to their demolition. If hazardous materials are identified as being stored in these areas at that time, those materials shall be transported to and disposed of/recycled at an appropriate off-site facility in accordance with applicable regulations. All PCB-containing materials (e.g., fluorescent light ballasts) shall be manifested and disposed of by a licensed hazardous waste contractor in accordance with federal and state regulations (40

CFR Part 761; Title 22, CCR, Section 66262; DTSC, 1994). Up to 25 mercury-containing fluorescent light tubes may be disposed of as non-hazardous waste, provided that the waste is not federally regulated and the tubes are disposed of at one time in a day (DTSC, 1994). If more than 25 mercury-containing tubes are disposed at one time in a day, the tubes shall be managed and disposed of as a hazardous waste or recycled (Title 22, CCR, Section 66262). An environmental professional shall be present to monitor demolition activities during removal of the floor/foundations to determine if hazardous materials releases, related to historic operations at the site, have affected soils beneath the floors/foundations. If contaminated soil were encountered or suspected (e.g., soil discoloration or odor), a soil sampling plan shall be prepared and implemented prior to disturbance of soils. If sampling is required, the soil samples shall be collected by a qualified environmental professional, and the analytical results evaluated for determination of soil management options and an appropriate health and safety plan for construction workers developed. Regulatory agency notification, if applicable, shall be completed.

Mitigation Measure PHS-3: To assess whether past land uses have resulted in pesticides and/or herbicides and other hazardous materials being present in shallow soils, soil samples shall be collected from areas of the project proposed for development. A soil sampling plan shall be developed by a licensed professional, in accordance with U.S. EPA SW-846 methodology (U.S. EPA, 1986), prior to initiation of grading on the site. A random sampling plan shall be developed for the entire region proposed for residential and commercial development. The samples shall be analyzed for organochlorine pesticides (U.S. EPA Method 8080), arsenic (U.S. EPA Method 6010), and chlorinated herbicides (U.S. EPA Method 8150) by a State-certified laboratory; a minimum of four samples shall be collected. The sample results would provide information on the need for additional investigations at the site. The results shall be evaluated by a qualified environmental professional (e.g., Certified Industrial Hygienist) to determine whether measured chemicals could pose a hazard to future site users, construction workers, or the environment. If chemicals at the site could pose a hazard, a qualified professional shall conduct a risk assessment to quantify hazards based on the sampling results, and develop appropriate remediation measures, as necessary, to reduce potential risks to future site users and/or the environment, to acceptable levels.

Mitigation Measure PHS-4: The contractor(s) performing grading and earthwork activities shall prepare a spill prevention plan for hazardous materials to be used at the site during development activities. The plan shall be prepared prior to the start of earthwork activities, and be submitted to the City for review. The plan shall designate an on-site employee responsible for plan implementation, and include the following: 1) types and quantities of hazardous materials; 2) anticipated equipment needs and maintenance; 3) temporary hazardous materials storage areas; 4) emergency response procedures for hazardous materials releases; and 5) procedures



for contacting designated regulatory agencies in the event of a hazardous materials release.

Mitigation Measure PHS-5: Compliance with the following would reduce this impact to a less-than-significant impact: 1) the appropriate federal and state regulations for employee training; 2) pesticide applicator training; 3) hazardous materials storage, labeling, hazardous materials inventories and permits; 4) pesticide use restrictions; and 5) pesticide application.

## **B. Conditions of Approval**

The following are Conditions of Approval required for the On-Site Wastewater System Alternative less-than-significant impacts.

### **1. Land Use**

Condition of Approval LU-A: The applicant shall work with the City Community Resources and Police Departments at the final trail design stage to develop trail designs and management regulations for Stanly Ranch that seek to minimize potential land use conflicts. It is expected that such measures would include:

- Provision of screening between Neighborhood 4 homes and the future River Trail Southerly Loop.
- Compliance with golf course industry standards for pedestrian safety through necessary means, including fencing or other barriers and/or design changes where trails are in proximity to the golf course and where trail users could be injured by golf balls. To minimize the height of fencing, trails may be designed at a lower elevation than surrounding terrain (i.e., depressed within the terrain) or curved fencing could partially cover the trail alignment.
- Provision of barriers to prevent unauthorized motor vehicle use.
- Provision of signs describing rules of operation (i.e., time of use, trail etiquette) at the public access parking area and other appropriate locations.
- The project shall include provision of adequate maintenance and police and/or private security resources.

### **2. Public Policy**

Condition of Approval POL-A: Implementation of the following Conditions of Approval shall be required:

- The applicant shall assist NSD in formally requesting a NSD Sphere-of-Influence amendment and annexation from LAFCO to annex the project site into NSD. The request shall be approved prior to the approval of a tentative



- map for the entire site or other similar approval per the Development Agreement for the project.
- If the request for annexation to NSD were not approved at that time, the applicant shall be required to implement an approved alternative method for providing wastewater treatment and disposal, such as an on-site wastewater treatment facility. If alternative methods of wastewater disposal are required, these shall be approved prior to approval of the tentative map for the entire site or other similar approval per the Development Agreement. Both alternatives shall be covered equally in the *Draft SRSP* prior to adoption.
  - Condition of Approvals recommended in the Public Utilities and Public Services sections of the EIR (IV.J and IV.K) shall be implemented.
  - The discussion found in the *Draft SRSP* regarding Napa County LAFCO shall be rewritten prior to Specific Plan adoption to indicate: 1) the fact that the project is not currently within the SOI of the NSD; and 2) the responsibilities of the applicant in coordinating with NSD in requesting a SOI amendment and annexation request from LAFCO.

Condition of Approval POL-B: The following safety and noise policies already contained in the *Draft SRSP* shall be implemented to reduce potential airport land use compatibility conflicts:

- Policy 4.1: Avoid developing within *Airport Land Use Compatibility Plan* Zone D (with the exception of the Environmental Interpretive Center).
- Policy 4.2: Locate residential development in *Airport Land Use Compatibility Plan* Zone E.
- Policy 4.3: Locate the resort, winery and wine center in Zone F.
- Policy 5.3: Inform buyers of the proximity of the Stanly Ranch to the Napa County Airport and the potential for aircraft noise.

The following additional Conditions of Approval shall be implemented to further reduce the potential for airport land use conflicts:

- As a condition of development, notification shall be provided to buyers in all compatibility zones through one of the following methods: dedication of overflight easements or deed noticing along with real estate disclosure statements. Regardless of the chosen method, the notification shall: 1) note that the property is subject to routine overflight by aircraft at low altitudes; and 2) provide positive assurance that a prospective buyer has received this information.
- Although no proposed uses or design features which may produce hazards to aircraft flight are proposed or anticipated, the *Draft SRSP* shall contain policies to avoid the following use or design over time : 1) glare or

distracting lights which could be mistaken for airport lights; 2) sources of dust, steam or smoke; 3) sources of electrical interference with aircraft communications or navigation; and 4) any use which may attract large flocks of birds.

- Zoning height limits shall be 35 feet or less. This is a modification to the draft development standards contained in Appendix B of the *Draft SRSP*.

### **3. Transportation and Circulation**

Condition of Approval TRANS-A: Prior to its adoption, the *Draft SRSP* TDM program shall be revised to be more specific regarding employee transit shuttles and implementation. Within one year of employee housing and resort construction, the shuttle shall be operational with annual monitoring by the resort operator and monitoring reports to the Public Works Director.

Condition of Approval TRANS-B: The *Draft SRSP* shall assure that a direct bicycle connection between a planned future southern crossing bicycle path through Stanly Ranch is retained by providing an easement area or areas for a direct bicycle path connection near the southern crossing.

Condition of Approval TRANS-C: The employee/public access parking lot shall provide a minimum 233 parking spaces, of which 20 shall be reserved and marked for public use, and shall reserve an adjacent upland area next to the highway (approximately 0.4 acres) for potential parking lot expansion. The resort operator shall monitor parking lot use for five years following resort completion and provide annual reports to the Public Works Department. If parking demand exceeds expectations, the applicant shall construct additional parking.

### **4. Geology, Soils, and Seismicity**

Condition of Approval GEO-A: The following standard City Conditions of Approval would apply:

- All project-related grading, trenching, backfilling and compaction operations shall be conducted in accordance with the City of Napa Public Works Department Standard Specifications.
- For all subdivisions and parcel maps, the applicant shall prepare a Soils Investigation/Geotechnical Report in accordance with Section 16.36.200 of the Napa Municipal Code. It shall be submitted to the Public Works Director for review and determination of adequacy before approval of the parcel or final map. The improvement plans shall incorporate all design and construction criteria specified in the report. The geotechnical engineer shall sign the improvement plans and approve them as conforming to their recommendations prior to final map approval. The geotechnical engineer

shall also assume responsibility for inspection of the work and shall certify to the City, prior to acceptance of the work, that the work performed is adequate and complies with their recommendations. Additional soils information may be required by the Chief Building Inspector during the plan check of individual house plans in accordance with Title 15 of the Napa Municipal Code.

Condition of Approval GEO-B: A 200-foot setback shall be observed for all structures designed for human habitation from lineaments L-4 and L-5 identified in Figure IV.D-1 unless further fault hazard evaluation is performed which concludes such setback is unnecessary.

## **5. Hydrology, Drainage, and Water Quality**

Condition of Approval HYDRO-A: The following combination of measures shall be included as Conditions of Approval for the proposed project:

- The proposed project shall not result in more than a 0.0003 feet increase in peak Napa River flood elevations at the site (corresponding to a 0.00002 foot increase at Edgerly Island) for the 10-, 50-, or 100-year storm event. If significant changes occur to the development plan relative to the conditions used in the hydraulic modeling, the applicant shall rerun the model using the final development plan conditions. The Public Works Department shall review the final development plans (and any model reruns) to ensure that quantitative peak flood increase limitations have not been exceeded.
- The Public Works Department shall review the final development plan to ensure that the project includes measures to minimize the amount of connected impervious surfaces. Wherever possible, the applicant shall direct roof runoff to infiltration trenches or vegetated areas prior to discharge to the storm drain system and non vehicle-related paved surface shall be constructed with a porous material. If site conditions render these Condition of Approvals infeasible in particular situations (e.g. unfavorable geotechnical conditions), the applicant shall submit a written explanation and request for waiver to the Public Works Department. The waiver must be approved by the Public Works Department prior to approval of the grading and drainage plan.
- The applicant shall submit a drainage plan designed in accordance with the City of Napa Standard Specification for the Public Works Department review and approval. In addition, since the project includes excavation and fill in the flood hazard zone of the Napa River, the applicant shall submit Certifications of Compliance (prepared by a civil engineer) to the Public Works Department at the times set forth in Chapter 17.62 of the Napa Municipal Code.



## **6. Biological Resources**

No Conditions of Approval.

## **7. Historic and Cultural Resources**

Condition of Approval HIS-A: A Certificate of Appropriateness shall be obtained from the Cultural Heritage Commission for any future exterior rehabilitation of the fruit drying building.

Condition of Approval HIS-B: If any future reinforcement is needed, the four Stanly Lane bridges shall be reinforced and rehabilitated, rather than being dismantled and rebuilt as steel arch culverts. The rehabilitation of the bridges would be consistent with *The Secretary of Interior Standards for Rehabilitation and Guidelines for Rehabilitation of Historic Buildings* published by the U.S. Department of Interior (1992). This Condition of Approval would keep project impacts less-than-significant.

Condition of Approval HIS-C1: It may not be feasible to move or reuse the other three historic Stanly Ranch buildings - the vehicle/tool shed, the carriage house, and foreman's house. Prior to demolishing or salvaging parts of these three buildings, the buildings shall be documented according to the Outline Format described in the Guidelines for the Historic American Building Survey (HABS) published by the Western Regional Office of the National Park Service. This documentation shall include archival quality, large format (minimum 4 by 5 inch) photographs of the exterior and interior of the building. Sketch floor plans of the buildings should also be included as part of the HABS documentation. A copy of the documentation, with original photo negatives and prints, should be donated to an historical archive accessible to the public, like the Napa County Historical Society, other suitable local history collection.

Condition of Approval HIS-C2: The applicant shall preserve any features of historic interest in the three buildings, and incorporate these features into the design of new buildings proposed for the Stanly Ranch. If the building is to be demolished, the applicant shall contact representatives of the Napa County Historical Society, Napa County Landmarks and the Napa Cultural Heritage Commission, and other interested parties. The representatives of these groups shall have an opportunity to examine the buildings and provide suggestions for salvaging elements of the buildings.

## **8. Visual Quality**

Condition of Approval VIS-A: Final design plans for the golf maintenance facility shall identify fencing and landscape screening from the proposed River Trail.



Condition of Approval VIS-B1: Mitigation Measure VIS-4 shall be implemented to ensure that the proposed lighting plans are consistent with the Design Guidelines of the *Draft SRSP*.

Condition of Approval VIS-B2: All new lighting shall be shielded to avoid glare and directed onto the project site and accessways.

Condition of Approval VIS-B3: Low-level lighting shall be utilized in any parking areas as opposed to elevated high-intensity light standards.

## **9. Population, Employment, and Housing**

Condition of Approval POP-A1: Prior to issuance of the first grading permit or other early approval as determined in the Development Agreement, the applicant shall enter into an agreement with the City to supply 54 employee rental units affordable to very low and lower income households (<50 percent of median income). The agreement shall include rent levels and ensure their continuing affordability over time. The applicant and/or property owner shall provide the City with a yearly accounting of the total affordable units occupied, the total units vacant, and the number of requests made by on-site employees desiring on-site affordable units.

Condition of Approval POP-A2: The City shall ensure that the employee housing is built in the first phase and at the same time as the resort area, wine center and winery are built.

## **10. Public Services**

Condition of Approval SER-A: Stanly Ranch shall comply with state law to accommodate increased demand on school facilities and services by paying the required fees.

Condition of Approval SER-B1: The applicant shall prepare, implement and administer the Source Reduction and Recycling Plan (SRRP) during the construction phase of the project. As the project is builtout, this responsibility shall be transferred to the various homeowners associations in the residential sector, and to the individual operators of the resort, golf course, winery and wine center for the non-residential sector. The SRRP shall provide that it shall be reviewed and updated every two years, and that it meets the City's Source Reduction and Recycling Element, with approval by the Public Works Director.

Condition of Approval SER-B2: At the final design phase, recycling facilities shall be provided in all areas where solid waste generating activities may occur.

Condition of Approval SER-B3: During the construction/demolition and renovation period of the project, the applicant shall use the franchised garbage hauler for the service area which the project is located to remove all wastes generated during project development, unless applicant transports project waste. If the applicant transports the project's waste, applicant must use the appropriate landfill for the service area in which the project is located.

Condition of Approval SER-B4: The applicant shall provide for the source separation of wood waste for recycling. Developer shall use the franchised garbage hauler for the service area in which located for collection of such wood waste, unless the applicant transports such wood waste to a location where wood waste is recycled.

Condition of Approval SER-B5: Recycling/solid waste enclosures shall be provided in accordance with Chapter 17.102 of the Napa Municipal Code (NMC) for all commercial, industrial and multi-family projects with common solid waste facilities.

## **11. Public Utilities**

Condition of Approval UTIL-A: To minimize energy use, project developers shall include proposed energy conservation measures in site design. These measures shall be verified at the time of tentative map approval and building permit issuance.

Condition of Approval UTIL-B: **The Master Developer shall coordinate with the City to formally request the formation of a community services district to operate and maintain the on-site wastewater treatment facility in perpetuity. The request shall be approved prior to the implementation of project construction.**

## **12. Noise**

No Conditions of Approval.

## **13. Air Quality**

No Conditions of Approval.

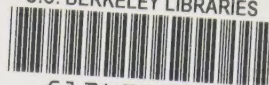
## **14. Public Health and Safety**

No Conditions of Approval.





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